

# rethinking marxism

from Kant and Hegel to Marx and Engels

Jolyon Agar

Critical Realism: Interventions

# **Rethinking Marxism**

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and Engels

**Jolyon Agar**

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# Preface

This book re-examines the Kantian and Hegelian influences on Marx and Engels's philosophical materialism. I argue that their dialectical materialism should be understood as a form of dialectical realist and emergentist materialism, which they construct by using essential principles found in Kantian empirical metaphysics and Hegelian phenomenological realism.

In articulating and defending this thesis I draw upon the critical and dialectical critical realism of Roy Bhaskar. I contend that his pre-spiritualistic writings on realism work best when harnessed to philosophical materialism to produce a philosophy of science that is extremely useful in constructing a convincing and accurate understanding of Kant and Hegel, and especially Marx and Engels.

I was inspired to write on this subject during my studies for my PhD. I was extremely uncomfortable with much of the literature on Marxism, which seemed to attribute to Marx a reductivist position, by claiming that he embraced a form of economic determinism, and to Engels a hopelessly naive grandiose philosophy of nature that was little better than a crude inversion of Hegel. In the last chapter of my doctoral thesis I began to explore an alternative interpretation of these thinkers which did justice to the system that seemed to me to be patently anti-reductivist. I quickly became convinced that the success of this endeavour on my part depended on re-examining the intellectual influences on Marx and Engels. This involved locating a possible Kantianism at work in their thinking, as well as moving away from the standard position that they undertake a simple inversion of Hegelian principles. The end result of these endeavours is, I hope, a contribution to the urgent task of rehabilitating dialectical materialism for a modern audience of Marx/Engels students.

But I hope it is not only Marxist scholars who will find something of interest here. In exploring the intellectual foundations of dialectical materialism I also undertake a realist examination of Kant and Hegel's

philosophies, which hopefully will prove useful to students of these thinkers. I argue that, although their systems are obviously more idealist than realist, they develop methodological principles that are essential to realism and without which the consistent realism achieved by Marx and Engels could not have been possible.

# Acknowledgements

This book began its life as the final chapter of my PhD thesis (Agar 2002) during which I first became interested in the importance of re-examining the Kantian and Hegelian influences on Marx and Engels. I am indebted in particular to Andrew Collier who, in his capacity as my PhD external examiner, encouraged me to expand upon this, and the current work is the fruit of that labour. Thanks also must go to the many people who have read and offered extremely useful criticisms of the various incarnations of this project. First, I wish to thank my PhD supervisor at Queen's University Belfast, Vincent Geoghegan, and my internal examiner, Shane O'Neill. Thanks also to James Martin, Iain MacKenzie, Jonathan Joseph and Alan Norrie, who have read and commented on my work over the years of my doctoral studies and right up to the present day. I also wish to thank Neill Morton, headmaster of Portora Royal School Enniskillen, who first introduced me to Marx when he taught me at Campbell College Belfast. Neill's erudite exposition of the *Communist Manifesto* generated my interest in Marx and inspired me to continue my studies at University and beyond. Finally, I am extremely indebted to my parents, Lesley and Ian, who provided me with essential financial and emotional support, without which this book could not have been written.

# Abbreviations

## Abbreviated titles

When introducing a published piece of work in the text I will first of all refer to its original date of publication in order to give the reader an idea of historical context. Thereafter I refer to the date of publication of the edition I am using. For example, when introducing Kant's CPR I will include in brackets its year of first publication (1781) and subsequently the date of the edition I am using (1998). In the list of abbreviations below I refer only to the latter date. This is to enable the reader to cross-reference each text with the bibliography.

### *Immanuel Kant*

CPR      *Critique of Pure Reason* (1998)

### *G.W.F. Hegel*

EL      *Encyclopaedia of the Philosophical Sciences* (1892)  
FK      *Faith and Knowledge* (1977b)  
PM      *Philosophy of Mind* (1894)  
PON      *Philosophy of Nature* (three vols; 1970a, b and c)  
PS      *Phenomenology of Spirit* (1977a)  
PSS      *Philosophy of Subjective Spirit* (three vols; 1978a, b and c)  
SL      *Science of Logic* (1969)

### *Karl Marx and Friedrich Engels*

CM      *Communist Manifesto* (1986)  
GI      *German Ideology* (1976)

**Karl Marx**

CI	<i>Capital</i> , vol. I (1977a)
CCPE	<i>A Contribution to the Critique of Political Economy</i> (1977b)
EPM	<i>Economic and Philosophical Manuscripts</i> (1977c)

**Friedrich Engels**

AD	<i>Anti-Dühring</i> (1977)
DN	<i>Dialectics of Nature</i> (1974)
LF	<i>Ludwig Feuerbach and the Outcome of Classical German Philosophy</i> (1988)

**Roy Bhaskar**

DPF	<i>Dialectic: The Pulse of Freedom</i> (1993a)
FEW	<i>From East to West: The Odyssey of a Soul</i> (2000)
PE	<i>Plato Etc.</i> (1994)
PN	<i>The Possibility of Naturalism</i> (1998)
RR	<i>Reclaiming Reality</i> (1993b)
RTS	<i>A Realist Theory of Science</i> (1978)

**Abbreviated terms**

1M	first moment
2E	second edge
3L	third level
4D	fourth dimension
CN	critical naturalism
CR	critical realism/realist
DCR	dialectical critical realism/realist
EC	explanatory critique
EPM	emergent powers materialism
IPO	interpenetration of opposites
NN	negation of the negation
SEPM	synchronic emergent powers materialism
TDCR	transcendental dialectical critical realism
TINA	there is no alternative
TMSA	transformation model of social activity
TQQ	transformation of quantity into quality
TR	transcendental realism
U-D-R	understanding–dialectic–reason

**For my parents, Lesley and Ian**

# Introduction

This book attempts a re-examination of the philosophical methodology that informs the thinking of Karl Marx and Friedrich Engels. I undertake this examination by returning to two other major thinkers in the tradition of German critical philosophy, Immanuel Kant and George Wilhelm Friedrich Hegel. I will argue that in their philosophies of science we can detect principles that are important to our understanding of the dialectical materialist philosophy of science at work in Marx and Engels. In particular, I contend that their very different approaches to philosophical apriorism are instrumental to the possibility of a workable and coherent dialectical materialism.

The seasoned student of Marx and Engels might at first glance be interested more in their possibly Kantian heritage than yet another study that points to the importance of Hegel. But I want to question the traditional assumption that they undertake a fairly straightforward ‘inversion’ of Hegel. I don’t deny the importance of Hegelian dialectics in Marx and Engels’s writings, but I argue that their intellectual debt involves a fairly significant transformation of Hegel’s method rather than them simply ‘turning him on his head’. This is to do with their apriorism, according to which philosophical deductions are based on studying the results of developing and evolving science. This is markedly different from the idealist apriorism, which we will see at work with Hegel in Chapter 4. And at the time Marx and Engels were writing, science was undergoing significant changes that made a simple inversion of Hegelian methods impossible. This commitment to acknowledging our understanding of the real world of pure materiality is something they share with Kant, as we shall see in Chapter 5. I will argue that Marx and Engels can only manage to construct a workable and coherent dialectical materialism to the extent to which they perform a materialist and realist transformation of Kantian and Hegelian apriorism.

An important aspect of our understanding of these developments will be the critical realist (CR) and dialectical critical realist (DCR)



philosophies of Roy Bhaskar. His exposition of a broadly workable philosophical realism will help us understand the methods of Marx and Engels and how Kant and Hegel are important to them. This does not mean that I think that everything Bhaskar has said can be detected in the writings of the former two. As we shall see (especially in Chapters 4 and 5), there are a number of issues on which my understanding of CR and DCR principles comes into conflict with Bhaskar. In particular, I feel that his recent spiritualist turn and his slightly odd attempt to incorporate a philosophy of external relations into a DCR system that seems to me to require a consistent philosophy of internality are two areas of contention. But, nevertheless, Bhaskar is a useful frame of reference, which I will urge the reader to keep in mind throughout my discussions.

In Chapter 1 I provide a brief introduction to CR themes prior to the dialectical turn, including giving Bhaskar's philosophy of science some historical perspective. Chapter 2 explores the dialectical turn itself and hopefully provides an accessible introduction to those eager to learn about DCR. To this end I lay some stress on how DCR is essentially the dialecticisation of many CR themes in order to give readers who have a background in Bhaskar's pre-dialectic period an easy introduction to these more recent developments in his philosophy. These introductory chapters do not serve simply as a (hopefully) painless first acquaintance with CR/DCR themes but also have a fairly large bearing on my main theses in the book as a whole and I refer back to them frequently. Nevertheless, those who are well acquainted with Bhaskar may want to skip these chapters.

In Chapter 3 I undertake my exposition of Kant's empirical metaphysics. We will see that this philosophy of science provides essential methodological foundations for a sustainable form of realism, including how it restricts the remit of apriorism to a posteriori conditions, a move I refer to as *weak apriorism*. Nevertheless, because Kant remains ensnared within Humean empiricism it cannot escape epistemic and ontic subject-object identity errors. This will be revealed via a Bhaskarian CR/DCR analysis.

In Chapter 4 I focus primarily on Hegel's *Philosophy of Nature* (PON) because I think that this text is the most valuable to those interested in understanding his philosophy of science. I defend a recent interpretation of Hegel undertaken by Alison Stone that a clear strong apriorism is at work in that philosophical conceptions of nature pre-exist our engagement with science. Scientific results do not provide a basis for Hegel's a priori concepts but are incorporated into them when they are in correspondence. Although I think that this is the most reasonable interpretation of Hegel and that there is much of worth in his thinking, I conclude that what we end up with is a philosophy of science replete with epistemic and ontic errors. Bhaskar is again of importance

here in that I think his pre-spiritualist DCR is important in exposing where Hegel has gone wrong. I stress pre-spiritualist DCR because I am somewhat concerned that his recent flirtation with spiritualism is incompatible with the dialectical philosophical realism of the work that immediately preceded it. In section 4.5 I explore my objections to Bhaskar in this regard and conclude that his 'spiritualist turn' is basically a form of neo-Hegelianism.

In light of this criticism the importance of Kant is greater still because, as I will argue in Chapter 5, his logic–reality dichotomy on which he constructs his empirical metaphysics is broadly compatible with a materialist weak apriorism. This provides a crucial part of my Marx–Engels discussions – they manage to avoid the epistemic and ontic errors of Hegel's strong a priori application of the dialectical method by returning (implicitly) to this important Kantian principle. Sadly, this is something that eludes Bhaskar (and others) in their attempt to reconcile DCR with spiritualistic idealism. The similarities to Kant are not our only points of interest in Chapter 5, however. I also argue that Marx and Engels avoid the errors of Kant's application of his a priori methodology by returning to Hegel's principle of the non-identity between philosophy and empirical science. All of these Kant–Hegel discussions occur after I demonstrate how Marx and Engels embrace a dialectical materialism which involves principles of emergentism, stratification and a philosophy of internal relations. Bhaskar's DCR is once more important to all of this, although again I am not totally uncritical of him, especially in his attempt to find space for a philosophy of externality. The most important thing to remember about Chapter 5 is that this workable dialectical materialism is impossible without these points of contact with Kant and Hegel.



# 1 Critical realism before the dialectic

## 1.1 Introduction

In these two introductory chapters I want to briefly set the scene for the book as a whole. I want to suggest that critical realism (hereafter CR), in general, and dialectical critical realism (hereafter DCR), in particular, are consistent with a materialist philosophical worldview, first developed by Karl Marx (1818–1883) and Friedrich Engels (1820–1895). This does not mean that I think that everything Bhaskar has said can be detected in their writings, as I have already indicated. But his writings are still very important to my intentions here, notwithstanding these points of concern. In the process of making my case I will also briefly chart the evolution of Bhaskar's philosophy from his first major book, *A Realist Theory of Science (RTS)*, to the works that represent his interest in dialectics, namely *Dialectic: The Pulse of Freedom (DPF)* and *Plato Etc. (PE)*. This discussion will be conveniently broken down into four major sections, covering this chapter and the next, corresponding to the four major themes of Bhaskar's system during the period from roughly 1975 to 1994. The first section of this chapter is entitled 'Transcendental realism' and is concerned with his realist philosophy of science and, in particular, his rejection of empiricist currents of thought including positivism. In this regard we will be mostly interested in *RTS*. We will then briefly comment on how Bhaskar, in his next major book, *The Possibility of Naturalism (PN)* develops these realist ideas into a philosophy of social science that is naturalist (in that there are said to be methodological similarities between the natural and the social sciences) but is steadfastly opposed to empiricist forms of naturalism. This section is entitled 'Critical naturalism', and it will deal not only with Bhaskar's attempt to overcome the agency–structure duality characteristic of hermeneutical and positivistic social theory but also with the contributions other prominent social theorists have made to the clarification of some key issues surrounding Bhaskar's endeavour.

Now, I do not claim to be adding anything new to any of these three

areas of Bhaskar's thought, and others have undertaken much more extensive treatments of them. I will refer readers to some of these authors throughout my introductory discussions of what we might loosely describe as Bhaskar's pre-dialectical period. But what I do hope to contribute is an examination of the transition from this period into the more recent period in Bhaskar's thought in which he develops a dialectical critical realist system. This task will be undertaken in Chapter 2. I suggest that most of the potential of critical realism formulated in the earlier works is most fully realised in this dialectical turn. And so I will be concerned with *DPF* and some important sections in *PE*.

I want to place my discussion of the early Bhaskar in the context of the history of philosophy. That Bhaskar's transcendental realism represents a realist transformation of Kantian transcendental methodology should be fairly familiar to most readers. But I want to suggest that the value of critical realist ontology lies not just in a realist but also in a materialist transformation of Kantian idealism. The materialist credentials of critical realism have often been an issue that has been left open-ended by scholars within the tradition, not least Bhaskar himself. By suggesting that a materialist understanding enriches realist ontology I am also suggesting that, rather than understanding critical realism as merely a philosophical underlabourer to the natural and social sciences, it functions as part of a much wider materialist philosophical system. This bigger picture, as it were, will hopefully come more fully into view when I link Bhaskar's Kantian heritage to the Hegelian and Marxian one that he develops in his dialectical works. But first of all let us place the pre-dialectical Bhaskar into some sort of historical context.

## 1.2 Transcendental realism

### 1.2.1 *Rationalism vs. empiricism: Plato, Leibniz, Locke and Hume*

In writing *RTS*, Bhaskar was mostly interested in challenging empiricist approaches to the philosophy of science. Since the Enlightenment this discipline has been characterised by the notion that the subject matter of science consists of constant conjunctions of events. In its encounter with the outside world the human mind perceives these events in the form of impressions or raw sense data and imposes on to them unity and order from which the regularity and conjunction result. Among its most important earliest proponents were John Locke (1632–1704) and David Hume (1711–1776). Both men's theories on the philosophy of the sciences were products of a very modern approach to a very ancient philosophical problem – *antinomy*, that is how we are to reconcile the domain of intuitive rationality with that of experience and how we are to account for the relationship between the process of

knowledge acquisition and the objects which it seeks to understand. Traditional resolutions – such as those of Plato – involved divesting any ontological significance from the domain of sense experience and the insistence that such questions could be answered only by focusing on the intuitive appreciation of ideas (what we might call a philosophical consciousness). Plato should be seen as an important forerunner of rationalism – the philosophical conviction that it was through the faculty of non-sensible rationality that knowledge of the mind-independent universe became possible.

What inspired Plato to take this position was his awareness of human imperfection and the conviction that, if only we could understand the whole of being, then we could strive to eradicate the weakness of our finitude that gives rise to the limitations and misery of the human condition. Plato posited a fundamental distinction between the human existence (humankind's temporal and finite existence) and the essence (the extratemporal and infinite being of humanity). Our existence, as it was grounded in spatiotemporality, was seen as contingent and transitory. For him, time represented the corruption of eternal being because it was non-eternity. Because we have a beginning in time, our existence can hardly be seen as something necessary as this fact presupposes a time when we did not exist. And so to posit eternal being in terms of something that is non-eternal (time) is a contradiction. What we are in fact positing in this case is simply our temporal existence, the conditions of the negation of our being. But Plato posited a human essence that did not reside in the world of non-being, an extratemporal domain in which our true being or essence could be found. And so human beings are other than themselves – through our experience of ourselves and the world around us we are participating only at the level of our existence but, nevertheless, we always strive to realise our true essence. Plato thought that in our lives we take cognisance of our own decline and have a perpetual longing to realise a state of perfection. He wanted us to free ourselves from the limits of our existence in time and our physical bodies, which are subject to imperfection and corruption.

This takes our understanding of being beyond the empirical study of matter. If space and time represent, by definition, the negation of being, then to assert, as Aristotle did, that the reality of being could be deduced from the observation of the finite is impossible. That is, if we want to understand our being, then there is no point in studying the finite manifestations of our humanity – our existence – because our essence by its very nature is undifferentiated and outside spatiotemporality. In this way, it is resistant to our attempts to conceptualise it via speech because to do so would involve the use of mediations which are its negation. And so we cannot understand being in opposition to the finite world because the former is utterly self-identical, whereas the latter can only be known via spatiotemporal mediation and hence can only

be known in terms of non-being. Being is thus fundamentally *intuitive*. We try to conceptualise essence but this is just evidence of our limited minds. It is beyond the powers of our comprehension to imagine that human being (or any other being for that matter) is not, properly speaking, 'something'. For this term merely distinguishes qualities of things in opposition to qualities of other things that an object does not possess. This presupposes that being is some conceptual entity that can be defined in terms of the things that it lacks. To refer to being by means of our everyday concepts is, inevitably, to refer to it as some 'thing' and so fail to grasp its true self-identity. It is to give it a spatio-temporal status, a 'something' that exists in a particular place and time. It is therefore to fail to grasp its true status as eternal, undifferentiated and thereby free from such limitations that conceptualisation forces upon it. And so, not only does being transcend the sensual world of experience, it also transcends rational conceptual ideas, although we are constrained by the limitations of our language to refer to it in these limiting terms.

Despite all this, Plato was confident that we could overcome this distance between our conceptualisation of being and being itself. If we could break free from thinking in our everyday conceptual terms, then we would not be condemned to eternal exile from being after all, and the way would be open to absolute knowledge. For it is in thinking spatiotemporally that we posit being as something external to ourselves, as 'things' that are qualitatively differentiated from each other and so disunited and transient. We need to stop thinking about us and the world around us as 'things' external to our consciousness. We need to stop believing that in our encounter with the world we merely absorb realities external to us in an empirical way and instead establish an intimate relation to the object. In this sense, we can liberate ourselves from contingency if we can overcome the alienation of the mind from its object. Humankind can re-establish a unity with being that it lost because of its inclination towards empirical thinking. Our ideas about reality and reality itself converge as the mind evolves beyond the limitations of the empirical. At last, existence becomes identical with essence.

Here we have Plato's introduction of dialectical progression towards being, and he anticipates much of Hegel's philosophy of history (Kolakowski 1978: 17) whereby problems of antinomy are resolved by unifying subject and object, as we shall see in Chapter 4. This introduced *stoicism* into philosophy – the indifference to the material world in preference to a heavenly realm of universals wherein true being was to be found. Particular configurations of matter that form the subject matter of sense perception were dismissed as being merely 'imitations' of the forms of which they were the manifestation. And so we should not use anything remotely resembling science to understand objective unities because all science reveals to us is the world of material imitations, the



world of division and multiplicities. Rather, philosophy was the key that unlocked the secrets of the eternal unity that was being. For example, if we want to understand a human being as a biological organism we study it scientifically to uncover its material properties but this will reveal nothing about his or her philosophical universal being. For this we need to search, via philosophical argument, for his or her form.

This basic philosophical principle – the establishment of the difference between empirical, factual and finite existence and eternity and infinitude, between contingent and authentic being – was adopted by thinkers from Aristotle to Augustine to Aquinas, from antiquity to the sixteenth century. Aristotle is particularly notable as the thinker who attempted to reconcile the sundered world of Platonism by introducing the idea of matter–form composites, whereby the material world could give us access to the forms and so was to some degree connected to them. This was an idea that had considerable resonance with Augustine and Aquinas. But the advent of the Enlightenment represented a serious threat to this traditional approach, threatened along with so many facets of the old life by the boundless confidence of the new sciences and their promises that they alone were the bastions of objectivity and truth. The reason of the individual rather than the authority of metaphysical speculation was now sovereign. But this did not mean that sixteenth-century Enlightenment thinkers wanted to completely abandon rationalist metaphysics. G.W. Leibniz (1646–1716) in Germany was a notable figure in this regard. He contended that the world was a rational totality determined in its entirety by what were known as principles of sufficient reason. The human intellect is struck by a rational order inhering in the world, causing it to make certain representations of it. The account of reality as ordered, structured and subject to causal laws characteristic of the new natural sciences was derived from this essential feature of nature. To be sure, human sensibility was by nature finite and through it we could only arrive at fairly limited concepts of the material world. But Leibniz thought that it was possible to arrive at much more complete concepts whereby each material substance contained infinite elements (Allison 1983: 20). Although humans could not arrive at complete concepts even with metaphysics (this ability was unique to God), it was essential to science. Leibniz employed a deductive method according to which concrete empirical inquiry was dependent on the formulation of abstract general notions (i.e. the formulation of logical essences) and only thereafter could scientists work down to concrete nature. Natural science could not be self-sufficient, therefore, and without rationalist metaphysics no knowledge of nature could be gleaned. And so we had a new approach to philosophy, which sought to reconcile the potential for truth contained in the new empirical sciences with old-fashioned convictions that rationalist metaphysics contained the means to uncover fundamental non-empirical



truths. Natural theology emerged whereby speculative metaphysics of the Platonic/Aristotelian/Thomist tradition gave way to an ordered causal universe as proof of truths that transcended the immediate concerns of empirical science but were indispensable to them. It was through the discovery of the harmony and order of the universe rather than revelation that God's presence was revealed. The problem with Leibniz's method was that it conflicted with that of Sir Isaac Newton (1642–1727), which involved, by contrast, the ascension from quantitative empirical phenomena to general principles.

This dispute provided the context for the empiricisms of Hume and Locke. The solution to the Leibniz–Newton dispute provided by Hume was to eliminate reason's role in the process of knowledge acquisition. The grounds of our beliefs about nature did not lie in some essential unity grasped metaphysically but rather in the mechanical and associative propensities of the human mind (Gardner 2002: 6). Hume therefore wanted to tie metaphysics firmly to cognition in general. But this elimination of metaphysics as non-sensible reason had the effect of dissolving the other pole of antinomy because the speculative status it enjoyed under both Plato and Aristotle was no more. The protection of epistemology from the outright scepticism that natural theology provided was removed. Neither Leibniz nor Newton, despite their conflicts, was prepared to countenance abandoning entirely the ancient rationalist principle that there was an indispensable role for non-sensible reason in the process of knowledge acquisition. However, Hume had no such qualms about making the final decisive break with the Platonic/Aristotelian tradition. Consequently, far from the mind having the capacity to philosophise its way to an understanding of idealistic objective unities of all it perceived, it was reduced to something akin to a blank slate whereby its function was merely to passively receive raw sense data in its experiences and then attempt to make sense of it. If there was no knowledge except that which was conveyed by the senses, then the mind could not apprehend reality as anything but a collection of separate phenomena. And so no intrinsic unity could be discovered in objects, nor could any natural law of necessity. To be sure, one notable proponent of empiricism (John Locke) supposed that underlying intrinsic unities and natural laws might exist – something akin to underlying substructures – but they were certainly nothing like a Platonic non-material form. Just because unities and laws were inaccessible via sense perception did not mean that we had to invent grand idealistic theories about forms to fill in the gaps in our knowledge. Rather, we conceptualise the substratum because we treat the simple ideas derived from sense impressions that represent an object as a single unifying totality. Thus, an objective unity and causal law were nothing more than a plurality of elemental properties on to which *artificial* unities and regularities were to be imposed by the mind in its attempt

to bring order and unity to the chaotic flux of the senses. If there was no way to penetrate beyond our conception of unity or causal law, then it was pointless to try to posit them as immanent features of the world. Clearly the confidence that the old philosophy had in uncovering objective essences and unities (when by objective we mean independent of the mind's direct experience of the world of matter) was shattered and replaced with a new kind of objectivity – the empiricist kind.

This new approach seemed to be more aptly classified as subjectivist. In their reversal of the fundamental principles of the Platonic tradition, Locke and Hume contended that the apparent unity that goes to make up objects of our perception (e.g. a forest or a planet) was simply a plurality of independently existing elements. To gain an explanation of any such object we simply reduce everything down to the essential constituent properties that are directly transparent to the senses. The logic of this was that it is only these properties that have an ontological status. For example, they would say that a tree is ontologically prior to a forest. In our sensate experiences the only things we take cognition of are the trees and we thus formulate simple ideas concerning them. That we also insist that through immediate sense perception we can see such a thing as a 'forest' is false – what we are in actual fact doing is merely taking simple ideas and using them to postulate a unified object, which is unverifiable because it is not immediately transparent to the senses. This does not mean that there are not unified substances, such as forests or planets, that exist independently of us but merely that the way we represent them is the result of this artificial imposition of substance on to raw sense data rather than the result of them being directly accessible to us in experience. Indeed, Locke prevented taking empiricistic thinking to its logical conclusion – a complete dissolution of the object – by his doctrine of real but unknowable unified essences that explain why we insist in thinking in terms of conceptual unities (Locke 1975: §III, Pt vi, para 6, 442). In this way, Locke's account of the unity of the object seems to be a little unclear to say the least. On the one hand he dismisses a metaphysical realist account of unity (i.e. that real substance is knowable), but on the other insists that the mind's imposed unity is dependent on an underlying objective unified substructure (Stern 1996: 10). To be sure, Locke still insisted that he was an empiricist and not a bona fide rationalist precisely because we cannot know through experience the intrinsic unities that our experience is dependent upon and we still must formulate our own representations of them. But in *A Treatise of Human Nature* Hume rejected Locke's quasi-substratum of real essences and insisted that the unified object was nothing more than a product of the imagination in its attempts to understand the things that the mind perceives (Hume 1978: Bk I, Pt 4, §3, 221). If we cannot know about any underlying unifying substratum intrinsic to mind-independent matter, then it is impossible

for it, if it even exists, to have any bearing at all on why we think, for example, that a collection of trees constitutes a forest. In other words, Hume rejects the Lockean concession to rationalism that in some way intrinsic unities impose themselves on to our experiences. But this does not mean that there is anything particularly special about the way in which our minds organise their perceptions of elemental properties either. We do not impose a unity on to these properties nor for that matter an account of their activities (i.e. causal laws) in any sophisticated sense. This is where Hume's grounding of metaphysics in general cognition comes in. He thought that when the mind thinks of an object it is associating together various 'particular qualities' or perceptions. For example, when I see something that I recognise as fire it is because I am associating various perceptions of its heat, appearance, etc. that I know are characteristic of that object. Now, this connection is so strong that I am not aware of any transition between qualities, and it is by virtue of this alone that unified objects are formed. To this end, Hume talks about the mind's 'principles of association', viz. resemblance, contiguity in time and place and cause and effect (Hume 1978: Bk I, Pt I, §6, 16; Stern 1996: 12). In his account, ideas about how objects are constituted (relational unities) are simply reflections on how the mind takes cognition of the objects of experience after we have experienced them. And so by radicalising the Lockean attack on substance (by rejecting any talk of an underlying substratum) Hume dissolved ontology altogether.

This Humean endeavour to dispossess non-empirical human reason of its status as the terrain wherein our beliefs about the external world are formed was not without its costs nor its critics, as we shall now see.

### 1.2.2 *Rethinking the Enlightenment: Kant's critical transcendental idealism*

It was not until Immanuel Kant (1724–1804) that talk of ontological unities was revived in his *Critique of Pure Reason* (CPR; 1781). This epochal work of Western philosophy should be seen as the fruits of a lengthy period earlier in Kant's life when he grappled with both Leibnizian rationalism and Humean empiricism only to finally reject fundamental aspects of them both. In *Dreams of a Spirit-seer Elucidated by Dreams of Metaphysics* (1766) Kant is seen to be closer to Hume than Leibniz by his rejection of the idea that we can make any metaphysical notions intelligible to ourselves with them functioning simply in the investigation of the *limits* to human reason (Gardner 2002: 16). However, he did not reject metaphysics entirely but held to the rather ambivalent position that metaphysical speculations may, after all, be valid even though we cannot establish their validity, and that the moral

conscience that most of us seem to have in our lives may indeed be evidence of our subjection to laws from a non-sensible spiritual realm (Gardner 2002: 16–17). But four years later he had by and large become sympathetic to rationalist metaphysics. In his *Dissertation* (1770) he undertook a radical new position within rationalism by dissolving the grounds upon which the Leibniz–Newton debate was founded. Both Leibniz and Newton had simply assumed that the world that rationalist metaphysics understood was the same as that of natural science, just viewed from a metaphysical perspective. Instead, Kant divided human cognition into two powers, sensibility and intellect, the former concerned with the world of sensible objects in space and time and the latter with non-sensible ‘intelligible’ objects (Gardner 2002: 18–19). Thus, the objects of experience and the objects from which metaphysical truth was to be formed were distinct. But the obvious problems that it was consequently impossible to prove the existence of intellectual objects and that intellectual principles such as Newton’s cause and effect could not be applied to the material world compelled Kant to revise the thesis of the *Dissertation* (Gardner 2002: 19), a move that precipitated total abandonment of rationalism.

The *CPR* should be viewed in the light of this rather confusing period in Kant’s life as the attempt to reconcile the anti-metaphysical thrust of *Dreams* with the rationalism of the *Dissertation*. If one were to sum up the main objective of the *CPR* in a sentence then one would have to say that it is to demonstrate on the one hand that indifference to metaphysics is not a serious option and on the other that metaphysics untied from empirical science is mere folly. The basis for this conviction was Kant’s insistence that both metaphysics and empirical science employed the same cognitive faculties. Both employ the same faculty of reason; therefore if one is exposed as contradictory so is the other and cognition as a rational phenomenon is undermined. In this Kant was in agreement with Hume, but the result was a system in which the metaphysics–cognition interconnection was massively more sophisticated. And so we have a system of thought that was uniquely Kantian – *empirical metaphysics*.

Why the *CPR* is so important to Western philosophy in general is due to the new method of critical philosophy it introduced. We will discuss this more in subsection 3.2.2. For now it is enough to say that from Plato to Hume philosophy was dominated by the pre-critical notion that our mode of cognition of objects simply conformed to the object-in-itself. Kant rejected this idea and insisted that we must look closely at the conditions of possibility of cognition. We cannot just presume that objects-in-themselves are simply given to the mind but must look at how the mind might itself be involved in the formation of the object. We will see in Chapter 3, when we look at this in much more detail, that this is central to the formation of the object-for-us by

Kant – a defining characteristic of transcendental idealism – that the object we experience is not simply an appearance of the object-in-itself but there is something in the mind a priori that determines how we cognise it.

In the *CPR* Kant agreed with Hume that explanations for objects and their activities were products of how the mind seeks to understand the sensate experience of elemental properties, and that Lockean talk of some unknowable quasi-substratum was incorrect. But Kant believed that Hume had vastly underestimated the function of the consciousness in this task. It does not simply organise the objects of experience after the process is completed but is actively involved in the process of their structuring and ordering (McCarthy 1988: 24–5). Kant asserted that there was a formal connection imposed on to objects by what he called a synthetic unity imposed on to sense experience by the mind. In other words, experience involves not only the intuition of the senses (Hume) but also something which exists a priori and that is the condition of possibility of intuition. That something was a particular type of *concept* of those objects. Raw sense data involves simply *receiving* representations through the faculty of sense intuition. For Hume the explanation for how the mind constructs unity and coherence out of what it perceives lies entirely at this stage. But Kant thought that the mind could only have these representations if it had a *conceptual understanding* that it uses to connect together the representations it receives through sense experience. Kant posited two types of concept. First, we have *particular* concepts that enable the mind to make judgements about certain representations, for example the judgement that ‘when water is boiled it turns to steam’. But this concept is dependent on much more *general* concepts that are the condition of possibility of the intuitive understanding of this event and they are known as the *categories* (Stern 1996: 19). In our example, to make the particular judgement ‘when water is boiled it turns to steam’ requires the categories of *unity* (so that the mind can understand the plurality of intuitions involved in observing the event of boiling water turning into a gas) and *cause* (so that the mind could understand *why* the water turns into a gas). The categories thus function to unite various concepts and their judgements and are indispensable to intuition (Kant 1998: A79/B104–5, 211). Kant’s theory that the mind synthesises the object is therefore dependent on these categories.

The consequences all this has for ontology are revolutionary, for Kant appears to reintroduce ontology by positing knowable underlying structures created by the mind that are independent of our sense experience. If the categories are central to the unity of intuition, then they must be said to determine the structure of objects that are experienced. In other words, by positing a priori connections of the understanding (Guyer and Wood 1998: 6; McCarthy 1988: 24) in this way Kant was

saying that the mind was actively involved in constructing reality as it was experienced and not just organising its understanding of intuitions it passively receives. Kant thus revived explanations of *underlying* unities of objects by placing them firmly within a constituting subject, something that Hume could not allow, given the rather modest powers he gave to the mind.

And so the Platonic concern to establish ontological unities that transcended the world of matter and was independent of our sense experience was revived by Kant. But we should not overstate this. Notice that Kant wanted to restrict this to 'reality as it was experienced' and so keep ontology firmly within the domain of possible empirical experience. Anything that is not subject to our sense experience can have no ontological status. In this way, we can see how Kant developed a *transcendental* ontology of the subject, because he places concepts of causation and unity exclusively within certain a priori capacities of the mind that it brings to its experience of the world around it, and so we have a *world-constituting subject*. This allowed the philosophy of the sciences to make claims of universality once more because there existed the conditions of possibility of universality by virtue of the ontology of the object that the a priori synthetic structures of the consciousness allowed. And as the object of experience is 'nothing other than the formal unity of consciousness' (Kant 1998: A105, 231) (a *phenomenological* object), the object-in-itself remains unknowable (a *noumenal* object) and is as such bereft of structural components in itself (i.e. unity and causal powers) that would give it ontological significance. Kant, in fact, calls the latter the transcendental object (Broad 1978: 226; Stern 1996: 26; Kant 1998: A250–1, 347–8).

And so we have a unified ontologically grounded object formulated by the mind, known as a *transcendental subject*. Such was the Kantian approach to *critique* – the location of the conditions of possibility of experience in the synthesising consciousness – known as the *transcendental analytic*.

It is important, therefore, to understand Kant as offering an idealistic (and, I hope to show, unsuccessful) reconciliation of the poles of antinomy. By claiming that synthesis was the a priori condition of possibility of experience, he posited an intrinsic interconnection between the process whereby we understand the object and the structure of the object itself, in the sense that any possible object must conform to the conditions of possibility of our knowledge of it. This is what philosophers mean when they talk about Kant's Copernican Revolution – the reversal of the assumption of Cartesian epistemology that our representations of the object must conform to the object-in-itself in the same way that Copernicus reversed the assumptions of astronomical science regarding the relation between the earth and the sun. And so Kant's answer to the question of how we are to understand the



relation between the object and our representations of it was neither to accept the basic premises of Cartesian epistemology (Locke) nor to deny that such a relation is detectable (Hume) (Stern 1996: 13) but rather to reverse its direction.

### 1.2.3 *Objectivity, subjectivity and the move towards transcendental realism*

In the process of this book, and in Chapter 3 in particular, I want to suggest that Kant's endeavour fails because what is involved is the collapse of the object into the process whereby we understand it. Now, this accusation of the collapse of ontology into epistemology is one that critical realists have levelled at just about anybody whose theory fails to sustain what, for want of a better term, I have called a *coherent theory of objectivity*. I will also refer to this as *subject-object identity*. It is worth mentioning here the reverse error that leads to a similar loss of objectivity, which Bhaskar calls the *ontic fallacy* (Bhaskar 1993a: 181). This quite simply is the ontological error of reducing our knowledge of the object to the object itself. In *DPF* Bhaskar calls this 'the compulsive determination of knowledge by being ... in the guise of reified facts or hypostatized ideas' (Bhaskar 1993a: 4) and elsewhere in the book 'the presupposition of the determination of knowledge by being' (Bhaskar 1993a: 90). Any theory that can be associated with Plato's objective idealism, Lockean and Humean empiricism or Kantian transcendental idealism is regarded as offering either of these subjectivistic solutions to antinomy. The importance of a coherent theory of objectivity cannot be understated in any introduction to Bhaskar's transcendental realism and so I will offer the clearest definition I can. Andrew Collier claims that subjectivity in our truth claims about the world occurs when epistemology 'loses its reference to what ideas are about, and comes to be a matter of coherence between ideas' (Collier 2003: 144), and, as a consequence, 'the objects of ideas have dropped out of the picture altogether' (Collier 2003: 144). So we are subjective when the things about which truth claims are made disappear from view completely. Ideas thereby lose their 'aboutness'. Conversely, Collier claims that to be objective 'is to refer to what is true independently of any subject judging it to be' (Collier 2003: 134). Ever since the Enlightenment the philosophy of the sciences has been characterised by forms of empiricism that more or less adhere to the basic principles of Hume that the objective status of the subject matter of science is an afterthought of the mind in its quest to impose order on sense impressions. In other words, the unity and causality of the object, and hence its capacity to be known, are dependent on our ability to take cognition of it as an empirical regularity.

Now, most empiricists are aware that every philosophy must also

presuppose a conception of the world as being in some sense ordered – a schematic answer to the question of what the world must be like to make knowledge of it possible (Bhaskar 1978: 28–29). That is, the world is not made up just of our experiences (i.e. sense impressions) but also *events* independent of the experiences that are the cause of them. And so they are prepared to acknowledge the *intransitivity* of the subject matter of science. In other words, they are prepared to accept that there is an *intransitive object* of science. By positing an ontology of events, post-Humean empiricists can address the obvious criticism of Hume that there must be things that happen in the world that are not necessarily directly experienced. For example, it is an empirical fact that, if I observe the sun shining on a rock, it will heat up. But this does not mean that I cannot allow for the possibility that there are many instances of this event that neither I nor anyone else has ever seen. So long as it is a *possible* object of my sense perception (i.e. an event that I could observe if I were present), then an empiricist theory could allow for it. This second level is known as the level of the *actual* (Bhaskar 1978: 64–65). But actualism is still subjective in the sense that the things that our theories are about are not ontologically distinguished from the scientific activity that produces our knowledge of them. This represents the way our knowledge loses its ‘aboutness’ in the domain of science. This is where Bhaskar comes in because his criticism is that the logic of scientific experiment involves a third *transfactual* level, whereby an ‘ontological distinction between (scientific) causal laws and patterns of events’ (Bhaskar 1978: 12; 1998: 10) is drawn. Scientists set up ‘artificial closures’ (experimental conditions) in order to isolate real generative mechanisms from others with which they interact in open systems to bring about events. In this very important sense scientists are ‘causal agents’ (Bhaskar 1978: 65) because it is they who are responsible for the precipitation of empirical regularities. It is therefore an absurdity to suppose that human-made empirical regularities carry any natural necessity. And so for experimental activity to contribute anything to our understanding of the world scientists must draw ontological distinctions between the subject matter of science (i.e. real generative causal mechanisms) and the events they generate or, as Bhaskar argues, ‘a sequence of events can only function as a criterion for a law if the latter is ontologically irreducible to the former’ (Bhaskar 1978: 65). Bhaskar’s transcendental realist ontology therefore involves *depth realism* in that there is an empirical, actual and real level to the world, as we have just seen (Collier 1994: 42–5).

It is this deep and stratified ontology that makes for the complex and multiform nature of interacting generative mechanisms. Events in open systems can be analysed only as tendencies; constant conjunctions are thus purely a phenomenon of closure. As Bhaskar contends, ‘statements of laws . . . are statements about the tendencies of things



which may not be actualised, and may not be manifest to men; they are not statements about conjunctions of events, or experiences' (Bhaskar 1978: 66). These scientific conditions involve the *activation* of one or more real generative mechanisms thereby making the subject matter of science *empirically manifest*. We do not actually see the mechanisms themselves but only ever the constant conjunctions that are produced and we extrapolate from the latter accurate accounts of the former. Scientific laws are about 'things, not events' (Bhaskar 1978: 51). Empiricists and actualists fail to take sufficient account of the reality that our experience is always of something that is external to our experiencing it. If we fail to incorporate this a priori fact about human experiences into our philosophising, then we commit a fatal error which, as Collier has put it, is 'the error of believing that experience is an object which we can inspect without reference to its objects – which makes subjectivism or idealism possible' (Collier 2003: 138).

Now, the lack of constant conjunctions in open systems means that even at the level of events the actualists have got it wrong. They posit something that does not actually prevail in nature or society as constitutive of being in open systems. In doing so they enter very dangerous epistemological and ontological territory because they cannot draw adequate distinctions between scientific activity and the things that are discovered independently of that activity. The latter, so to speak, 'falls out of the picture', and they become interested only in a type of event produced by our activity. What produces the event is lost. This is not to say that events are not real in the sense of having an ontological status. But if we say that it is *only* events that are real, then we cannot make the necessary ontological distinction between the process that produces our knowledge and the things that our knowledge is about. The consequence of this subjectivistic error is the view of the world as made up of atomistic events. And so the world is *deontologised*. This whole process is what Bhaskar calls the *epistemic fallacy* (Bhaskar 1978: 16; Bhaskar 1993a: 205).<sup>1</sup> And insofar as we are reducing being to statements about being devised in human thought the epistemic fallacy also takes the form of an *anthropic fallacy* (Bhaskar 1993a: 205).

As we have seen, a closely associated concept, this time dealing with errors concerning ontology and its implications for epistemology, is known as the ontic fallacy. That is, if the loss of transfactual natural necessity is at work in the epistemological error of reducing the object to our knowledge of it, then the same loss is at work in the opposite direction in the ontological error of reducing our knowledge of the object to the object itself. In *DPF* Bhaskar calls this 'the compulsive determination of knowledge by being . . . in the guise of reified facts or hypostatized ideas' (Bhaskar 1993a: 4) and elsewhere in the book 'the presupposition of the determination of knowledge by being' (Bhaskar 1993a: 90). Thus, to be truly objective necessitates drawing categorical distinctions between the domains of the empirical, actual and real

(Bhaskar 1978: 56; Collier 1994: 42–5). If we accept this, then we accept the possibility that there is necessity in nature that is independent of human activity, something which Bhaskar has called *natural necessity* (Bhaskar 1978: 14).

#### 1.2.4 *Bhaskar's realist transformation of Kantian transcendental idealism*

Notice that Bhaskar's critique of empiricism/actualism is similar to Kant's. That is, the crux of Kant's critical transcendentalism is the assertion that scientific inquiry involves a priori propositions that are its conditions of possibility. For Kant they are the concepts and categories of the mind that are essential if it is to make sense of the manifold of intuition. Crucially, Kant is contending here that the a priori is indivisible from sense intuition in that, although their transcendental character means that the categories cannot be derived by abstraction from particular experiences, they have absolutely no meaning whatsoever outside their applicability to the domain of experience. The categories thus consist of the 'principles of the possibility of experience' (Guyer and Wood 1998: 62–3). In the section of the *CPR* entitled 'The Transcendental Analytic' (about which more will be said in Chapter 3) Kant is clear on the matter:

But the elements for all *a priori* cognitions, even for arbitrary and absurd fantasies, cannot indeed be borrowed from experience (for then they would not be *a priori* cognitions), but must always contain the pure *a priori* conditions of a possible experience and of an object of it, for otherwise not only would nothing at all be thought through them, but also without data they would not even be able to arise in thinking at all.

(Kant 1998: A96–7, 227)

And again:

The Transcendental Analytic accordingly has this important result: That the understanding can never accomplish *a priori* anything more than to anticipate the form of a possible experience in general, and, since that which is not appearance cannot be an object of experience, it can never overstep the limits of sensibility, within which alone objects are given to us. Its principles are merely principles of the exposition of appearances, and the proud name of an ontology, which presumes to offer synthetic *a priori* cognitions of things in general in a systematic doctrine (e.g. the principle of causality), must give way to the modest one of a mere analytic of the pure understanding.

(Kant 1998: A247, 345)

Bhaskar agrees with Kant that if the world were in a constant state of chaos then no scientific understanding of it would be possible. Given that the world is structured and ordered, it is the task of science to discover the particular structures that exist objectively and make scientific practice possible:

It is not necessary that science occurs. But given that it does it is necessary that the world is a certain way. It is contingent that the world is such that science is possible. And, given that it is possible, it is contingent upon the satisfaction of certain social conditions that science in fact occurs. But given that science does or could occur, the world must be a certain way.

(Bhaskar 1978: 29)

The transcendental distinction (realist or idealist) between philosophy and science has significant implications for the former. While philosophy's job is not within the realm of empirical inquiry itself but in the explication of the necessary ontological conditions for practice to occur in the first place, it nevertheless considers the same subject matter but from the perspective of the conditions for its possibility. It therefore evaluates the a priori conceptualisations and either discredits them (when implicit beliefs are inconsistent with the actual practice) or defends them (when the practice is in accordance with the conceptualisations). Transcendental philosophy is concerned with evaluating scientific *practice* – what we have said are the implicit elements that inform empirical inquiry. The evaluation of scientific methods and implicit beliefs is in terms of their consistency with philosophical knowledge of the object of science as it exists independently of actual scientific practice (or experience). This philosophical knowledge is arrived at through antecedently existing knowledge – the accumulated body of knowledge from previous empirical inquiries. Thus, for Kant and Bhaskar philosophy has an unmistakable function in evaluating the validity of knowledge production in the sciences by assessing the a priori conceptualisations implicit within its practice. In this way, like Kant, Bhaskar claims that what is deducible as philosophical a priori can be formulated only after scientific investigation and so the prerequisite of deduction is a posteriori knowledge. Thus, we can say that the transcendental method of a priori deduction presupposes a posteriori retroductive techniques. In *PN* Bhaskar insists that such a deductive method is central to philosophical cogency (Bhaskar 1998: 6). And in *RTS* he contends that philosophical knowledge is arrived at through antecedently existing knowledge – the accumulated body of knowledge from previous empirical inquiries. Thus, philosophy has an unmistakable function in evaluating the validity of knowledge production in the sciences by assessing the a priori conceptualisations implicit within its

practice. In this way Bhaskar claims that what is deducible as philosophical a priori can only be formulated after scientific investigation, and so the prerequisite of deduction is a posteriori knowledge. We can say that the transcendental method of a priori deduction presupposes a posteriori retroductive techniques.

Before we examine how Bhaskar differs from Kant I think it would be useful to look at how Kant believed objects are scientifically constructed more closely so that we can understand exactly what he means here. As we have seen, scientific knowledge requires the philosophical establishment of synthetic a priori judgements, which essentially means establishing universal notions of objects that go beyond what can be known merely by virtue of the contents of their scientific conceptualisation (Collier 1994: 17–18). There are conditions attached to the act of conceptualising objects. These take the form of rules and principles of the mind, which govern the way it conceptualises the objects that are experienced. In this account, Humean constant conjunctions are a necessary but insufficient basis for ascribing natural necessity to an object. In other words, the synthetic a priori characteristics of any object that is empirically conceptualised in actual sense experience is the condition of possibility of arriving at such a conceptualisation, in that it is that which transcends the conceptualisation and must be fulfilled prior to it. These conditions involve locating the object in a determinate position in space and time; spatiotemporality thus becomes the framework located in the unified self (the mind) within which all conceptualisations must be made as a condition of their possibility. Time and space are good examples of what Kant means when he talks about general categories of the understanding which have no meaning outside the conditions of possibility of experience (Broad 1978: 20). Kant is thus accepting an important principle of Hume's, namely that we can conceptualise objects that we experience only by virtue of their ordered appearance, and by ordered appearance Kant means Humean constant conjunctions. But Kant rejected the rather flat epistemological surface that was the consequence of Hume's 'principles of association' because he could not accept the latter's contention that there was nothing a priori about the ways in which the mind orders the manifold of sense intuition. Kant supposed that the consequence of Hume's position is that natural necessity is lost – both relational unities and cause and effect are divested of any universal and necessary import.

To be sure, Kant acknowledges the Humean point that the objects of science *are* constant conjunctions but that the ways we gain empirical knowledge of them *as* constant conjunctions depends on something more than what happens at the moment of sense experience alone. They rely on transcendental metaphysical synthetic a priori conceptual structures. It is these structures that are the categories and, as I have said, they are evidence of the much more sophisticated and complicated

role given to the mind by Kant, a role that is far beyond anything that Hume is prepared to countenance. And, as I have also said, Kant thinks that the categories are powers of the mind that cannot be derived from simple abstraction from the moment of sense experience but nevertheless have no application outside their function as providing the conditions of possibility of experience. Kant believed that he had thereby discovered truths about human knowledge in general in that this was the essential form which experimental science took (Collier 1994: 23).

Despite this critique of Hume, Bhaskar thinks that Kant is a subjectivist because while he is correct to think that a priori structures that make science (and ordinary everyday experience for that matter) possible are in fact the categories of the mind, Bhaskar contends that the *world-in-itself* is structured and differentiated and that, although it is not transparent to us in our immediate experiences, we can nonetheless gain scientific knowledge of it.

Thus, the transcendental realist asserts, that the world is structured and differentiated can be established by philosophical argument; though the particular structures it contains and the ways in which it is differentiated are matters for substantive scientific investigation.

(Bhaskar 1978: 29)

He argues that Kant does not meet our account of coherent objectivity as the latter's account of natural necessity is ultimately reducible to the processes whereby we experience the world. That which transcends our experience – the structure and coherence of the world – is seen as the constituting subject in accordance with Kant's Copernican Revolution. Natural necessity is imposed by the mind on to matter to make experience possible. In this account ontology has merely a subjectivistic empirical function. Bhaskar, on the other hand, wants to make what is a priori part of the material things-in-themselves. He wants to reverse the order of the subject-object relation of Kantian idealism and make it *realist*. He posits that that which makes nature knowable resides not in the a priori faculties of a constituting subject but a constituting object-in-itself. The structures that are the conditions of possibility of experience are not dependent on human perceptions – features of the world that make scientific knowledge possible are 'real' features (Collier 1994: 22–3). When Bhaskar talks of 'real' structures he means that they do not depend on human beings at all for their existence; they could exist in an unpeopled world. Furthermore, they are knowable without the mind necessarily imposing a structure on to them, so an object may be knowable without being known a priori. This is impossible for Kant; knowable structures cannot exist without people, only the noumenal object. In this way, Bhaskar dissolves Kant's categories

but retains their critical transcendental logic. And in so doing he hopes to establish a transcendental method that meets our criteria of a coherent theory of objectivity.

### 1.2.5 *Empirical realism*

Bhaskar calls philosophers who reduce knowledge of being to the process of knowledge acquisition (i.e. subjectivism) *empirical realists*. Their subjectivism commits them to the dogmatic postulation that current states of knowledge of objects are to be equated with their being (Bhaskar 1978: 32). As we have seen above, Bhaskar argues that we must distinguish the empirical grounds of causal laws that enable us to identify them – constant conjunctions of events – from their existence as such in open systems:

Thus the intelligibility of experimental activity presupposes the categorical independence of the causal laws discovered from the patterns of events produced. For, to repeat, in an experiment we produce a pattern of events to identify a causal law, but we do not produce the causal law identified. Once the categorical independence of causal laws and patterns of events is established, then we may readily allow that laws continue to operate in open systems, where no constant conjunctions of events prevail. And the rational explanation of phenomena occurring in such systems becomes possible.

(Bhaskar 1978: 34)

Now, I think that he would classify Kant as an empirical realist because his conception of spatiotemporality and the categories were merely facets of the mind in its attempt to understand the manifold of intuition. That is, Kantian a priori structures could not escape their identification in terms of human experience. And so I think that Bhaskar regards transcendental idealism as simply a more sophisticated approach to the reduction of ontology to epistemology, the reduction of being to the process of knowledge acquisition. Kant's epistemology was a far cry from the flatness of Hume's, but ultimately it was still not suitably distinguishable from the objects of knowledge to offer a philosophical system that was genuinely objective.

Bhaskar, in fact, makes a rather interesting assertion about the empirical realists in *RTS*. He contends that Hume's denial of a philosophical ontology necessitated an implicit ontology in order to sustain the intelligibility of scientific claims about the world.<sup>2</sup> The contention that constant conjunctions exist in open systems constitutes the implicit claim that sense experience must be viewed as an event and constant conjunctions as causal laws (Bhaskar 1978: 42). In other words, the



vacuum created by the collapse of the ontological realm into the epistemological one does not mean that the ontological realm is completely dissolved but merely that what is an explicit part of a methodological system (i.e. a priori philosophical knowledge) becomes implicit within the remaining epistemological realm. Bhaskar argues that this negates the possibility of substantive scientific criticism and hence denies the dialectical and sociohistorical nature of scientific inquiry that we have established above is crucial for the development of knowledge towards a greater understanding of the intransitive and transfactual object. If we accept the empirical realist thesis, then it commits us to equating the object as it is understood via experience with the object as it exists apart from experience and so we arrive at complete and total knowledge. Bhaskar calls this characteristic of empirical realism *epistemological absolutism*. If we say that our knowledge is indistinguishable from ontology, then we can dissolve the ontological realm and fill the gap left with the assertion that sense experience is an event and constant conjunctions are causal laws; i.e. we have no need for a separate realm because the terms associated with it are part of our sense experience.

### 1.3 Critical naturalism

#### 1.3.1 *Ontological stratification in the natural and social worlds*

Our discussions have, up to this point, focused on Bhaskar's depth realism. But an important reason why Bhaskar thinks that there is a lack of empirical regularity in open systems is because of a second feature in his theory. Constant conjunctions do not occur because every event is going to be the outcome of the interaction of many different generative mechanisms. In short, open systems are much too complicated and layered to give empiricistic prediction any utility. What makes the multiplicity of generative mechanisms a feature of the world is its *stratification* (Collier 1994: 46). According to Bhaskar, the world is made up of many different layers or strata, ranging from the lowest (physical) to the highest (sociological). Each layer has attendant generative mechanisms that have causal powers to affect empirical outcomes similar to those at higher or lower levels. And so we have a multilayered nature of being. The reason why nature and society are stratified is because higher levels (such as society) *emerge* from lower levels (such as chemistry and biology) over many years (and in the case of the emergence of the levels belonging to biology from more basic chemical levels we are talking many millions of years). The result of this emergence is the development of new strata or being, each with their own attendant generative mechanisms.

Bhaskar calls this theory *synchronic emergent powers materialism* (SEPM; Bhaskar 1998: 97). At the beginning of time there were only the subatomic particles of the early universe, from which emerged over billions of years first fairly simple and eventually more complex biological organisms. There then emerged from complex biological organisms even more complex sentient ones. From the biological there thus emerged the psychological. And from the increasingly sophisticated psychologies of *human* organisms there emerged over a period of several million years forms of society and history:

It appears that the material universe existed before there was organic life, and that living organisms can only exist as composed of and surrounded by matter. In this sense, matter may be said to be more 'basic' than life; life in turn may be said to be more basic than rationality (in the sense that we are rational animals), and hence than human society and its history. This suggests that the sciences that explain a more basic level may have some explanatory primacy over those explaining a less basic layer. Laws of physics and chemistry may *in some sense* explain the laws of biology.

(Collier 1994: 46)

With this account of emergence we get the sense that empirical outcomes are always going to be highly complex and multidetermined. For example, if a neurologist wants a physical explanation for how human beings can feel emotional trauma then he/she will seek out neurophysiological mechanisms that allow the brain to experience such mental states. In this way the mechanisms for which an explanation is sought are said to emerge from deeper mechanisms at a more basic level of reality and so, in this sense, the neurophysiological explains the psychological. The psychological could not exist without the neurophysiological but the latter could easily (and often does) exist without the former. And so the reduction of higher to lower strata, such as in this instance, is acceptable to Bhaskar and he calls it *diachronic explanatory reduction* (Bhaskar 1998: 98). But it is important to understand that he is not saying that if we want to understand emotional trauma, we should concentrate all our energies on studying the physical processes in the brain that generate it. We should be aware of these physical causes because they are an important factor. But because they have emergent properties and causal powers in their own right, the psychological processes independent of the neurophysiological stratum on which they depend are going to feature in the empirical outcome that is the emotional states. And so a complete account of how human beings can experience emotional trauma requires another science at a higher level, emergent from the neurophysiological, namely psychology. To reduce



psychology to neurophysiology, as many philosophies of science have tried to do, as we shall see in a moment, would be to ignore the causal powers of the former that demands the study of them in their own right.

Each level of emergent reality is thus irreducible to those from which it emerged. But the very fact that it did emerge from those lower levels explains why those causal powers exist in the first place. The reason why we experience emotions is because human psychology has emerged from biological processes taking place in the brain, which in turn have emerged from more basic biological (physiological) processes, which in turn have emerged from chemical processes, and so on. In this regard, Collier has differentiated two types of scientific explanation – horizontal and vertical (Collier 1989: 60). In horizontal explanation the interaction of the different levels of being in the world (physical, chemical, biological, psychological, sociological, etc.) is assumed, each with equal causal mechanisms. But horizontal explanation by itself is insufficient because if we were to leave it at that we would have no idea as to how it was possible for such interaction to occur. In vertical explanation we investigate the conditions of the emergence of these mechanisms in the first place, which are prerequisites to their interaction at the horizontal level.

Vertical causation also involves a naturalistic approach to the philosophy of the social and natural sciences. Naturalism quite simply is the claim that there should be a methodological unity between them. As the subject matter of the sciences is transfactual emergent generative mechanisms, it follows that the human and social sciences will have methodologies that are very similar to those of the natural sciences. Just as in the natural world, social structures and agents are going to be endowed with relatively enduring powers and properties that enter into necessary relationships with each other, leading to co-determined outcomes and hence the variability of events in open systems. Just as outcomes are contingent in the natural world, so it is even more so in the social domain because, even though it is historically contingent that society is as it is at any particular time, its transfactuality means that it is nevertheless capable of being studied using methods similar to those of the natural sciences (Archer 1998: 195–6). This is why Bhaskar's application of realist theory to the human and social sciences is known as critical naturalism (CN).

Two important implications of this account of CN are important here. First, it logically follows from what I have said above that the higher level strata will be subject to more causal laws than those lower down. The emergent properties of psychology will have their own causal powers, to be sure, but vertical explanation ensures that they are also subject to neurophysiological laws, then more basic biological laws, then chemical laws, and so on. As we have seen, a complete scientific

explanation of why and how humans are rational and intelligent beings will include physical, chemical, biological (including neurophysiological) and psychological explanations. In this way, higher level strata are assemblages of many properties at many levels of being. But an inanimate object, such as a stone, is only subject to physical laws and so is an assemblage of much fewer properties. The higher up the strata we get, then the more complex vertical causality becomes and so the more complicated our complete scientific explanations become. In this way, the 'relations between more basic and less basic domains are one-way relations of inclusion: all animals are composed of chemical substances but not all chemical substances are parts of animals, and so on' (Collier 1994: 107).

Andrew Sayer explains the point well when he says that '[t]he nature or constitution of an object and its causal powers are internally or necessarily related: a plane can fly by virtue of its aerodynamic form, engines, etc.; gunpowder can explode by virtue of its unstable chemical structure' (Sayer 1992: 105). But the result of these internal relations is the emergence of an object (e.g. a plane) which contains powers that are irreducible:

We would not try to explain the power of people to think by reference to the cells that constitute them, as if cells possessed this power too. Nor would we explain the power of water to extinguish fire by deriving it from the powers of its constituents, for oxygen and hydrogen are highly inflammable. In such cases objects are said to have emergent powers or liabilities which cannot be reduced to those of their constituents.

(Sayer 1992: 119)

Thus, with the emergence of any stratum comes attendant causal powers that are unique to it. And when that happens, while it may be possible to explain why and how this stratum emerged in reductionist terms, we cannot use them to account for the causal powers that are produced. Vertical causation is vital but it should only be understood as relating to the emergent interconnections between strata. The *specific* ways in which the attendant generative mechanisms interact within such a totality and how the totality itself interacts with others will be a fact about the *specific* interactions of these many layers of emergent being. And so, if we need vertical explanation to account for the emergent existence of strata and their attendant generative mechanisms, then we need horizontal explanation to account for the activity of those mechanisms once they have emerged.

The second major implication of SEPM is that it is at least compatible with a materialist philosophical worldview, even though Bhaskar himself does not seem to want to make this connection.<sup>3</sup> Although he

is committed to ontological *realism*, as we have seen, he does not commit himself to ontological *materialism*. I think this is a fairly important equivocation, not least because it is my intention to demonstrate that the mediating link between Kant, Hegel, Marx and Engels is provided by an ontological materialist application of CR and DCR. But the point that Bhaskar makes is essentially this – just because we are committed to an ontologically realist account of the laws that dominate the social and natural worlds we are not automatically committed to the ontologically materialist account of the universe. In other words, we can be critical realists without having to subscribe to some grandiose theory about the origins of space and time. It is perfectly possible to accept the essential principles of SEPM – an emergent and stratified account of material being – but also insist that there must be some supernatural force in the universe (e.g. God) that is the original cause of its basic material constituents from which ever increasingly complex material strata have emerged over billions of years. Many scientists who base their understanding of the workings of the universe on clearly identifiable materialist grounds still insist on some form of idealism. The reason for this is quite simple. Astrophysicists are at a loss as to explain the beginnings of the universe in purely scientific materialist terms, and many are convinced that a materialist philosophical explanation is simply inadequate and that we can deduce the existence of a higher intelligence that is ultimately responsible for the creation of the material universe. Bhaskar's recent spiritualist turn panders to this kind of thinking. But as we shall see in section 4.5, I argue that the attempt to operate CR (and DCR) principles within such a mindset leads to subject-object identity. In later chapters I contend that, despite his reticence about attributing ontological significance to principles such as SEPM in his pre-spiritualist days, I think an implicit materialism is at work. I argue that in his 'spiritualist turn', however, he ends up invoking the Hegelian principles which in his earlier works he does so much to undermine. The reason for this examination of the relation between ontological realism and materialism as regards SEPM is fairly important, because when I suggest in the following chapters that DCR represents a fundamental enrichment of it I will be reliant on proving that it is compatible with a Marxian materialisation of Kantian and Hegelian idealisms. But we are getting a little ahead of ourselves here. For now, it is enough to appreciate how SEPM can provide us with explanations about how the social and natural world's layered nature is precisely the kind of thing that makes a transfactual account of events so convincing – we have an account of the causal powers belonging to inter-related generative mechanisms at various levels of reality. An important reason why empirical realists have denied transfactuality is because they have denied ontological stratification and so have posited a unidimensional and flat world.

### 1.3.2 *Errors of reductionism: positivism and hermeneutics*

Bhaskar's theory of stratification and emergence brings him naturally into conflict with the empiricistic naturalists (e.g. positivists) and the anti-naturalists (hermeneutical theorists). The former have historically wanted to reduce the subject matter of psychology to the status of mere epiphenomena of the social structure, whereas the latter wish to reduce sociology to epiphenomena of cognitive psychology.

Positivist social theorists such as Emil Durkheim (1858–1917) have tended to construct a social ontology of structures. They have proposed a crude reduction of the psychological to the sociological. These theorists argue that social behaviour is governed by social structures. Sociological 'laws' are therefore entirely determinant of individual beliefs. The latter are thus reduced to the epiphenomena of the former. Again, the explanation for this type of social theory lies in empirical realism. Positivistic social theorists have attempted to reduce human intentions and beliefs to the status of mere epiphenomena of observable empirical facts in the material social structures.

An example of the hermeneutical alternative to positivism is methodological individualism, the foremost proponent of which is probably Max Weber (1864–1920). This approach involves a kind of social ontology according to which individual social agents possess subjective and agential powers that cannot be reduced to the facts of their society's social structure or their biological constitution. Thus, society and culture are said to be dependent for their existence on the ideas of the individuals who participate in it (Creaven 2000: 2). The complexities of social structure are reduced to the analysis of simple parts – individuals (Bhaskar 1998: 27; Collier 1994: 138). Now, it is important to understand that this stems from a hermeneutical account of the social world. This account assumes an empirical realist account of causation. Hermeneutical theorists concede to the positivists the empiricist claim that constant conjunctions govern the behaviour of matter. But they insist that it does not explain the psychological motivations that govern the behaviour of individual social actors. Hermeneuticists therefore reject positivism's unity of natural and social science on the grounds that empiricism could only produce knowledge of the materiality of objects but not the inner meanings at the level of their conceptualisation. As the subject matter of social science is, they claim, reducible to individual motivations to act epistemically, significant closure is impossible and so the rules governing the natural sciences are 'literally useless' (Bhaskar 1998: 21) when applied to the social domain. Whereas positivist methods may be adequate in the natural sciences where objects have only material forms it is wholly inadequate in the social sciences where objects contain these inner meanings beyond their material existence.

But because critical naturalists want to present a stratified and

emergent ontology they reject hermeneutical anti-naturalist accounts of human praxis upon which methodological individualism is founded. Once again, the root of their critique lies in the rejection of empirical realist ontology. If reality is made up of a hierarchy of causally efficacious and interconnected levels, an adequate account of human praxis will involve the causally efficacious powers of an individual's psychological predispositions by virtue of their existential autonomy from the sociological and biological strata from which they emerge. This will allow psychological factors to have a causal impact on these lower levels of reality because they have causal powers that are every bit as real as those of the material social structures from which they emerge. But just as the psychological has causal powers irreducible to those of social structure, so the social structure has powers which we cannot explain by reducing them to the status of epiphenomena of human intentions. Individuals are placed into 'patterned and enduring social relationships which exist independently of their will and which shape their actions and consciousness in determinate ways' (Creaven 2000: 2). The sociological explanation of someone voting for a leftist political party cannot, critical naturalists would claim, be reduced entirely to the intentions that this individual may have in doing so, independent of the social relationships within which he or she functions. All kinds of structural influences will be at work in a person developing values and beliefs that would motivate him or her to vote in a particular way on election day. The decision to vote for a party that he or she perceives to have a leftist political platform will depend heavily on socioeconomic and cultural factors, precisely the structural relations into which specific individuals are placed and which are relatively enduring.

### 1.3.3 *Dualities of structure and praxis*

It is clear, therefore, that critical naturalists want to propose an alternative to these dualisms – that the activities and intentions of human beings may be existentially autonomous from the social structures from which they are emergent but that, equally, social structures contain causal powers that are independent of the will of the agents on whom they depend for their continued functioning. To this end, Bhaskar introduces two rather important concepts. The first refers to the autonomy of the social structure from the particular individual agents who occupy roles and fulfil functions within it, and Bhaskar calls it the *Transformational Model of Social Activity* (TMSA). For example, dominant social institutions such as the Church are going to pre-exist particular individuals who occupy positions within them and so they do not create them but merely *transform* them (Bhaskar 1998: 33–4). Individuals rely on already existing social categories – theories, paradigms, techniques of inquiry (Bhaskar 1998: 34). In short, TMSA involves the

assertion of the temporal and explanatory primacy of social practices over the intentional human actions that reproduce and transform them (Bhaskar 1998: 107–8). This involves a structural duality – the structure determines the character of the activities of human agents who occupy social roles within it but is nevertheless subject for its reproduction and transformation on these activities. Social positions occupied by agents endure irrespective of the individuals who occupy them and so are not reducible to but can only exist by virtue of the individuals who occupy them (Collier 1994: 150).

The second important concept involves human praxis itself, which also has a dual character. On the one hand we have the intentions of particular individuals who occupy social positions within the structure, which are known as *conscious praxis* (Bhaskar 1998: 30). On the other we have the unintended consequences that an individual acting according to his or her will has for the social structure. Bhaskar calls these *unconscious praxis* (Bhaskar 1998: 30). Now, Bhaskar thinks that most of our actions in the social world are simultaneously conscious and unconscious praxis in that the intentions an individual may have in behaving in a particular way differ from the social function that is fulfilled in the sustenance and transformation of the social structure. There is, therefore, a distinction between the intentions that human beings may have in acting in a particular way and the social function of that activity in its perpetuation and transformation of the area of the social structure concerned in Bhaskar's account:

the properties possessed by social forms may be very different from those possessed by the individuals upon whose activity they depend. Thus one can allow, without paradox or strain, that purposefulness, intentionality and sometimes self-consciousness characterise human actions but not transformations in the social structure. The conception I am proposing is that people, in their conscious activity, for the most part unintentionally reproduce (and occasionally transform) the structures governing their substantive activities of production. Thus people do not marry to reproduce the nuclear family or work to sustain the capitalist economy. Yet it is nevertheless the unintended consequence (and inexorable result) of, as it is also the necessary condition for, their activity . . . I want to distinguish sharply, then, between the genesis of human actions, lying in the reasons, intentions and plans of people, on the one hand, and the structures governing the reproduction and transformation of social activities, on the other.

(Bhaskar 1998: 35)

That is, the social structure may provide the necessary conditions for human activity but the intentions behind that activity are themselves



necessary for the development of the social structure itself. On the other hand, Bhaskar argues that the social structure is the ever-present condition of those intentions that are said to be external to their fulfilling a particular social function. Let us look at his example from the quotation above. An individual's intentions in getting married (conscious praxis) will generally be very different from the social function (unconscious praxis) the institution of marriage has in perpetuating the institution of the family. The institution of the family is seen as an important one for society and society therefore provides the conditions for marriage to be possible. Therefore, the intentions individuals have in getting married are autonomous from the institution. From this we can see that there is a necessary interconnection between the duality of the social structure and that of praxis. The social structure determines the form that human agency takes and is the outcome of that agency, hence the duality of its structure. This duality is, in turn, dependent on the duality of praxis as it requires the intentionality upon which conscious praxis is based and the transformational impact of both it and unconscious praxis in the transition from one social structure to the next. As Bhaskar argues, 'society stands to individuals, then, as something that they never make, but that exists only in virtue of their activity' (Bhaskar 1998: 34). And again:

society must be regarded as an ensemble of structures, practices and conventions which individuals reproduce or transform, but which do not exist unless they do. Society does not exist independently of human activity (the error of reification). But it is not the product of it (the error of voluntarism).

(Bhaskar 1998: 36)

#### 1.4 Explanatory critique

This duality of structure and agency means that the social sciences are unique among the sciences in that their subject matter includes values important to individuals who participate in social life. In this respect hermeneutics are going to play at least a part in any social scientific research project. As Andrew Collier says, a historian must understand the ideas and values of puritanism before he or she can properly analyse the English Civil War and Commonwealth (Collier 1994: 171). A Puritan will have a specific set of ideas as to the causes of the English Civil War. Now, it is important to Bhaskar's argument that the ideas an individual has about a social category may contradict the social functioning of that category. Quite often, concepts held by agents may be incorrect in the sense that they may not wish to transform their social positions because of an incorrect view of them. Thus, the functioning

of the category at its existential (i.e. its intransitive) level is regarded by Bhaskar as the *real* cause of an event (in this case the English Civil War) that may contradict the explanation offered by the Puritan. Social science is therefore also unique among the sciences in that it criticises part of its own subject matter, in the sense that it is critical of the views of the people it describes (Collier 1994: 171). But the job of social science does not simply consist of exposing an erroneous belief about a category. It must also explain why people came to have that belief in the first place. In this way, the social scientific analysis of real causes necessitates a critique of categories that foster false beliefs among the populace.

Now, the obvious question one has about Bhaskar's argument is how do we determine what is and what is not a false belief? We can use the example of the wage-form in capitalist economics. This is a relationship entered into by the worker and the employer whereby the worker is forced to sell his or her labour at a price that is equal to its value. For Marx, this fostered the belief in the worker that a fair trade had taken place, whereas in reality (i.e. the real state of affairs caused by the wage-form relationship) the product of the worker's labour was only partially paid back to him or her in the form of wages and the rest was taken by the employer. The wage-form, therefore, is a social category that is sustained by engendering beliefs that are inconsistent with its functioning. CN social science involves establishing a necessary connection between the facts of a social category's functioning and the values held by an individual engaged within it, as they are necessary to sustain it. A social scientist should analyse social categories using methodologies similar to those in the natural sciences but that the ideational component is necessary for those categories functioning means that he or she must be *evaluative* in his or her analysis of them:

If, then, one is in possession of a theory which explains why false consciousness is necessary, one can pass immediately, without the addition of any extraneous value judgements, to a negative evaluation of the object (generative structure, system of social relations or whatever) that makes the consciousness necessary (and, *ceteris paribus*, to a positive evaluation of action rationally directed at the removal of the sources of false consciousness).

(Bhaskar 1998: 63)

Explanatory critique (EC) is not only concerned with false beliefs engendered by some or other social phenomenon but also with the frustrated human needs that may result from it. Indeed, it is not the falsity of the worker's belief that he or she is entering a fair trade in selling his or her labour power in return for its value (a *cognitive error* in Bhaskar's analysis) that is the central goal of EC. Rather, it is the



practical and physical consequences this has on his or her human needs (known as *unfulfilled being* in Bhaskarian terms):

The notion of false consciousness employed here simply involves in the first instance that of disjuncture, mismatch or lack of correspondence (representative adequacy) between belief and object. But . . . this general pattern of argument may be readily extended to accommodate more interestingly specific forms of false consciousness, and indeed more generally of defective or unfulfilled being.  
(Bhaskar 1987: 178)

Therefore, social science identifies a human need and identifies the means whereby it is being frustrated through the perpetuation of false beliefs in some or other social institution. Social science is equally critical of its object in the case of non-cognitive EC, in that by identifying an institution as fostering false beliefs that have the consequence of denying some human need social science is necessarily critical of that institution. Social science can be said to contain an *assertoric imperative* in this analysis (Collier 1994: 183). By identifying a specific human need and its frustration, the social scientific critique of the object that is the source of that frustration provides the means of resolving it. Marx identified the phenomenon of exchange value in capitalism, in which the things that a labourer produces have a value purely in terms of how much they are worth in the marketplace rather than as an expression of the labourer's creativity. The worker is therefore 'alienated' from what he or she produces on the factory floor. This alienation allegedly represents some kind of denial of human need. By identifying that some need is being frustrated and the reason why it is being frustrated, Bhaskar could argue that Marx's analysis contained a necessary resolution of this humanitarian problem.

Moreover, Bhaskar argues that EC identifies not only that some social phenomenon may be the cause of some or other frustrated need but that such a state of affairs may be necessary for the social phenomenon's existence. In such cases, EC uncovers *functional* and not merely *causal* relations. For example, Marx's analysis of capitalism uncovered that false consciousness and alienation were necessary for the existence of relations essential for market, such as exchange values and use values, and that false consciousness was the means whereby need-based frustrations were concealed (Collier 1994: 184). These are the necessary contradictions of capitalism. There are other contradictions in capitalism that Bhaskar argues were analysed by Marx using EC, including overproduction crises and the tendency towards falling profit rates. Bhaskar's interpretation of Marx's analyses of them represented the most important subsets of need-based EC in social science to date (Collier 1994: 184).

Bhaskar therefore wishes to emphasise that the key to human emancipation is the rectification of non-cognitive exploitation and frustration. An understanding of the real relationship involved in the wage-form by the worker does not of itself free him or her from exploitation because the source of his or her exploitation and frustration is located in the social system itself. It is awareness of a false belief that precipitates political action directed at the transformation of the social structure concerned. Emancipation must be achieved in the realm of practical activity rather than in the mind:

It is my contention that that special qualitative kind of becoming free or liberation which is *emancipation*, and which consists in the *transformation*, in self-emancipation by the agents concerned, *from an unwanted and unneeded to a wanted and needed source of determination*, is both causally presaged and logically entailed by explanatory theory, but that it can only be affected in *practice*. Emancipation, as so defined, depends upon the transformation of structures, not the alteration or amelioration of states of affairs. In this special case an emancipatory politics or practice is necessarily both grounded in scientific theory and revolutionary in objective and intent.

(Bhaskar 1987: 171)

The phrase 'from an unwanted and unneeded to a wanted and needed source of determination' is crucial in Bhaskar's analysis of what actually constitutes freedom. True freedom can only occur in a world in which agency is causally efficacious – where reasons and desires to change some source of frustration arrived at through recognition of false consciousness are instrumental in the transformation of it. That is, agency or conscious praxis is a co-determining mechanism in the transformation of a social structure, as we have already seen in our discussion of the TMSA.

It should be obvious now why Bhaskar's theory of non-cognitive EC requires a CN analysis. It is only through the analysis of the generative mechanisms at work in a social phenomenon which is suspected of causing false consciousness and unfulfilled being that the critique of it and hence suggested resolution of it can be possible. We have already seen how this is so with the endowment of agency with an ontological status in terms of it being a phenomenon with causal powers equal to anything we might find in nature so that it is subject to scientific analysis as a generative mechanism. In this respect the hermeneutical conception of agency in which a natural scientific analysis of it is denied cannot offer any emancipatory potential, according to the logic of Bhaskar's position. There is one other area in which EC depends on a CN analysis. In order for EC to provide any emancipatory potential,

'knowable emergent laws must operate' (Bhaskar 1987: 211). This amounts to the claim that synchronic reduction favoured by reductive materialist philosophies negates the possibility of human emancipation. To deny social categories their own generative and causal mechanisms by arguing that they are explicable in terms of the physical properties of which they are made is to ignore the social properties of them within which such things as values and beliefs lie, properties that have a clear causal effect on the transformation of social categories. According to EC, therefore, synchronic reduction in social science cannot emancipate, only manipulate, human beings (Collier 1994: 199–200). Again, this is a theme that will be explicated in more detail in the remaining chapters.

### 1.5 Conclusion

These important CR themes that suggest an emergent, stratified, trans-factual world and an anti-empiricist naturalist social science are potentially epistemically and ontically coherent. However, I argue in the second of these introductory chapters how this potential is only realised once they are understood in terms of dialectical philosophy. This development of philosophical realism into the arena of dialectics is essential to my purposes in subsequent chapters and so its importance cannot be overstated. Bhaskar's more recent works, particularly *DPF* and *PE*, are extremely useful contributions to my later endeavours and it is to these texts that we now must turn.

## 2 Dialectical critical realism

### 2.1 Introduction

- Even a cursory glance at Bhaskar's dialectical turn is enough to deter many enthusiastic students of CR from reading his later works. This is not due to any lack in the quality of Bhaskar's work – on the contrary *DPF* and the sections in *PE* that deal with his dialectical turn represent valuable contributions to dialectical philosophy. Indeed, it is because I am convinced of the importance of what Bhaskar is doing in these writings that I feel compelled to articulate (in, I hope, a more accessible form than Bhaskar himself manages) the transition from the pre-dialectical period in his thought to DCR itself. In this chapter I will attempt to demonstrate that the dialectical writings represent the dialecticisation of many important CR concepts.

Being able to demonstrate such a coherent transition from CR to DCR is essential to the overall objective of this book – that DCR can help us to identify a transition in German philosophy from Kant through Hegel to Marx and Engels. In the last chapter I suggested that Bhaskar's pre-dialectical work contained essential CR concepts that are the result of a realist transformation of Kantian transcendentalism. But in the dialectical turn, Bhaskar proceeds into territory in which Kant would hardly feel at home. The reason is that, if in his pre-dialectical work Bhaskar owes an intellectual debt to Kant, then in his dialectical turn he owes a debt to Hegel. Hegel spent much time and energy refuting, in particular, Kant's insistence that dialectics were crucial to the mind's necessarily fruitless (but important) attempt to understand the object-in-itself.<sup>1</sup> Now, this might suggest that any attempt to find a painless transition from CR to DCR is going to be difficult. But in actual fact it is surprisingly easy. Easy, that is, if we can ground both CR and DCR in a materialist philosophical outlook. What I am trying to say here, in a nutshell, is that Marxian dialectical materialism can unite the methodologies of Kantian and Hegelian philosophy if not the substantive content of their idealisms. Such a unity is possible if we

can identify a materialist application to which their philosophies can be put. In Chapter 5 I will argue that Marx and Engels formulated a materialist transformation of Hegel rather than just a simple 'inversion'. And what is perhaps even more interesting is that they achieve this by the implicit use of aspects of Kantian transcendentalism.

I want to suggest that, if we can demonstrate that there is a coherent passage from CR to DCR with Bhaskar, then this will provide us with the means of pointing to an interconnection among Kant, Hegel and Marx/Engels. Because CN and EC are applications into the social world of a transcendental methodology that owes much to Kant, it seems obvious to me that if we can connect this period of Bhaskar's writing to DCR, which, I will demonstrate, involves a Marxian inversion of Hegelian dialectics, then we can start to explore the ways in which the methodologies of Kantianism, Hegelianism and Marxism are themselves connected.

Just as I suggested in the last chapter that Bhaskar's realist transformation of Kantian idealism should be understood as contributing to a materialist philosophical transformation of transcendental categories, so I want to suggest in this chapter that his endowment of these categories with a dialectical logic owes much to a materialist transformation of Hegelian idealism. The result is a DCR system that involves a materialistic application of both Kantian and Hegelian methodologies. And it is precisely in this application that we can see the influence of Marx and Engels's philosophy that avoids the crude reductionism of the main theoreticians of Second International dialectical materialism.

And so in introducing the transition from CR to DCR I hope to set the scene for a major theme in the book – the examination of the relation of Marx and Engels to Kant and Hegel. Given that I have said that this hinges on identifying a more or less coherent transition from Bhaskar's pre-dialectical period to his DCR one, I think it is incumbent on us to chart the transition from the earlier to the later Bhaskar, and so it is to this task that we must first devote our attention.

## 2.2 Making critical realism dialectical

### 2.2.1 *The transition to dialectic: first moment to second edge*

We saw in the last chapter that empirical realism, in its various guises, involves the assertion that the subject matter of the sciences cannot possibly be non-actual real causal mechanisms. This is important to the understanding of why Bhaskar introduces the dialectic to CR because an important aspect of the domain of the real is the category of *negation* or *absence*. Bhaskar wants to argue that absences (i.e. instances of non-being) are real in that they have a clear ontological character. It has

been his intention, as we have seen, to show that once one is committed to the CR worldview one must accept the non-actual, non-empirical, transfactual, emergent and stratified character of social and natural laws that operate in situations of 'dual and multiple control, multiple and plural determination' (Bhaskar 1994: 43). The best way of explaining this is to point, as Bhaskar himself does (1993a: 51), to SEPM. As we saw in the last chapter, this is a very important term because it accounts for the emergence of higher from lower strata (for example, the emergence of the sociological from the psychological). In a sense this process is a *positive* one because we are talking about the emergence of new entities and structures, each with causal powers from lower levels of material reality. Bhaskar refers to the emergence of new matter as *autopoietic* (Bhaskar 1993a: 49), which simply means the *creation* of new causally efficacious phenomena.

SEPM constitutes a central aspect of what Bhaskar calls in *DPR* and *PE* the *first moment* (1M), and so in our discussions on CN in the last chapter we have already grasped a large part of the first major area of concern in DCR. As such, as well as stratification and emergence, 1M includes categories of transfactuality (non-identity between the domains of the real and the actual) and the distinctions between the transitive and intransitive dimensions. This is the level of scientific conceptions that are abstracted from the process of change (Bhaskar 1993a: 8). At 1M we are concerned, first, with the epistemological theories of transitive/intransitive dimensions and, second, with the ontological a priori derivations of the transfactual efficacy of phenomena. This involves positing the knowable world as independent of the human mind (and therefore intransitive) and consisting of transfactual causally efficacious generative mechanisms. Third, we posit the emergent and stratified structures (the theory of ontological stratification). These are thus purely abstract categories and, as such, say nothing about the spatiotemporal processes of change that are affected as a consequence of their operations.

CR concepts thus present us with a problem in that they are fundamentally *abstract*. But Bhaskar wants us to think of them as products of historical processes. It is understanding 1M categories in this sense that requires concepts of absence and hence dialectical thought. As Bhaskar argues 'dialectics depends upon the positive identification and transformative elimination of absences . . . the process of *absenting absences*' (Bhaskar 1993a: 43).

At this point, it might be worthwhile mentioning that the category of dialectical absence will be of central importance when contrasting idealist and materialist–realist dialectics in later chapters because, as Bhaskar states, 'reference to absence is quintessential to non-idealistic dialectic' (Bhaskar 1993a: 43). But for now it is enough to know that

where DCR marks an important new development in realist philosophy is in the assertion that emergent entities and structures are not only *positive* existents but contain as a condition of their possibility *negativities*. There is a fundamental *bipolarity of absence and presence* in every emergent entity or structure. I want to immediately qualify that statement by saying that DCR is not essential to the explanation of anything and everything that is the opposite of presence. I may make the depressing deduction from my observation that my red Volkswagen Polo is parked in my driveway that it is evidence of the absence of a silver Porsche 911. Fine, but I don't need to be versed in the ways of realist dialectics to realise that. Where DCR becomes useful is when absences are instrumental in the formation of the *being* (or what we will see in a moment Bhaskar calls the *existential constitution*) of something. If the very being of my Polo depended on it being the absence of a Porsche 911 (or anything else for that matter), then we would need DCR to explain it. But it doesn't, so we don't. That is, it may be true that the presence of my Polo is indeed evidence of the absence of a Porsche 911, but such evidence is not of much epistemic interest. It is a bit pointless to reduce *real* absences to the status of anything that *really is not* there (Collier 1998: 690), because the presence of my Polo is not any more evidence of the absence of a Porsche 911 than it is of a bus or an RAF Harrier jet or a packed lunch. I could literally spend forever producing evidence of what real absences the presence of my Polo represents. I am not saying that my Polo cannot represent the presence of the absence of something that is essential to its being but only that the use of absences has epistemic value to us only in this limited (i.e. philosophically interesting) sense. It is precisely in this limited sense that DCR is important. Take, for example, slavery. We can identify it as a negative presence because it represents, as a condition of its possibility, the negation of freedom. It thus is a bipolarity of negativity and positivity because it is an emergent thing that is every bit as definable by what it lacks as by its positive qualities. Now, what Bhaskar means by negative presence is, quite simply, the presence of an absence. Slavery owes its existence to the *presence* of the *absence* of freedom. Thus, that slavery's *being* is dependent upon the absence of freedom means that the freedom/slavery-absence/presence bipolarity becomes philosophically interesting to us. As Branwen Gruffydd Jones makes clear:

The notion of absence has significance in relation to some concept of the being of particular things in the world. A significant absence is the absence of some thing, condition, or aspect which is relevant to the being of some object, process or context; and as such, has a negative evaluative content by reference to the particular being

concerned. Thus any blank wall could equally be described as a wall without pictures hung on it, in a trivial sense; whereas the wall of an art gallery which is blank because the picture which normally hangs there has been stolen could be described in terms of absence more meaningfully.

(Gruffydd Jones 2003: 41)

With this important (if a little monotonous) qualification made we can hopefully proceed to my main point, which is that Bhaskar introduces a new important level to emergence, what he calls the *second edge* (2E) within which the bipolarity of absence and presence resides. Apart from emergence being indispensable to the refutation of actualist ontology (as we saw in the last chapter), it also suggests to us that the process of the formation of new matter and its attendant irreducible causal powers is a 'tensed process in space-time' which Bhaskar calls a *rhythmic* (Bhaskar 1993a: 52). Processes at 1M are placed in the geohistorical context of their functioning:

1M suffices for, e.g., an adequate account of science which abstracts from space, time and the process of change, which posits 'principles of difference' or 'metaphysical inertia'. At 2E, which is the narrowly dialectical moment in a four-sided dialectic, the very principles of indifference are called into question . . . This is the moment of cosmology, of human geo-history, or personal biography, laborious or routinised work but also of joyful or idle play.

(Bhaskar 1993a: 8–9)

Thus, what we understand as the causal efficacy of emergent strata must be connected to rhythmical processes defined as tensed processes in space-time (Bhaskar 1993a: 52). Or, to be more precise, the process of determinate negation governs emergent causality. In short, a world of dialectical change or the phenomenon of emergence as ontologically real presupposes absence (Bhaskar 1994: 165). Bhaskar clearly states what he has in mind when he says:

Emergence entails both stratification and change. So far I have concentrated on emergent entities and causal powers. But if, as I have already argued, all changes are spatio-temporal, and space-time is a relational property of the meshwork of material beings, this opens up the phenomena of emergent spatio-temporalities . . . Eventually I will want to tie space, time and causality very closely, around the theorem of the reality and irreducibility of (always spatialisating) tense and the potential and typical spatio-temporality (and hence processuality) of all causal efficacy in the definition of process



as the mode of absencing which is the beginning and begoing of effects.

(Bhaskar 1993a: 53, 54)

He insists on such a close linkage between space, time and emergent causality by insisting that 'emergent social things' are 'existentially constituted' by their geohistories:

for those who doubt the propensity of such a close linkage (and emphasis on spatio-temporal process), just ponder the extent to which emergent social things (people, institutions, traditions) not only presuppose (that is to say are dependent on) but also are *existentially constituted* by (as a crucial part of their essence) or merely *contain . . . their geo-histories* (and, qua empowered, possibilities for their spatialised futures).

(Bhaskar 1993a: 54)

The spatiotemporal process in which something emerges is therefore part of its very being and must be referred to when we classify it as this or that object. Of central importance is that 2E functioning involves the negation of states of affairs and hence includes the category of real determinate transformative absence. In our example above, slavery is a 1M concept, but in order that we understand how it came to be we need to understand the sociohistorical processes that brought it about. That is, we need to appreciate that it is the outcome of a sociohistorical process whereby freedom has been negated and so we need to understand it in 2E terms, as a spatiotemporality engaged in a rhythmical process. 1M emergent categories are the products of spatiotemporal transformations and so need to be understood in terms of negation or absence. In this way, 2E represents the level of transformative absences or, in Bhaskar's own words, the linkage of '1M causally efficacious determination to 2E transformative negation' (Bhaskar 1993a: 52).

### 2.2.2 *Contradictions and dialectics: second edge to third level*

In section 2.7 of *DPF* Bhaskar introduces us to some concepts that are important to bipolarity. They are *heterology*, *constellationality* and *duality*. Of heterology Bhaskar says:

This can mean one or more of the following: (1) not true of, or applicable to, itself (in which case its contrary is autology); (2) not the same as itself (where the contrary is homology); and (3) not true for and/or to itself (which I shall sometimes specify as 'alterology') . . . It is by means of heterology in senses (1) and (2) that

the forwards or ex ante movement of dialectic unfolds, with the dialectical comment (dc') in particular explicating what is true of, but not present in, some base concept or form.

(Bhaskar 1993a: 113)

In the first two cases Bhaskar is referring to fundamental contradictory states of existence in an object – when it is 'not true of, or applicable to itself', 'not the same as itself'. That is, there will be a detectable bipolarity in the object and it is when an object is in such a heterological state 'that the forwards or ex ante movement of dialectic unfolds'. This is because dialectics help to explicate 'what is true of, but not present in, some base concept or form'. An example of a heterological state is alienation:

*'Alienation'* . . . means *being something other than*, (having been) separated, split, torn or estranged from oneself, or what is essential and intrinsic to one's nature or identity. What is intrinsic to oneself need not be internal to, in the sense of physically inside, one – as in the case of one's kindness or a magnetic field; and what is still essentially one's own at one level (e.g. one's humanity) may be alienated at another (e.g. by being subjected to gross indignity). To be alienated is to lose part of one's autonomy.

(Bhaskar 1993a: 114)

Alienation is therefore a good example of a state of heterology in some concept or form – in this case the human condition – which generates dialectical contradictory relations.

Bhaskar then introduces us to some important terms that help to explain what forms contradiction takes. We have already introduced one concept that is central to the geohistoricising of emergent causality – existential constitution (that emergent strata and their causal powers are to be understood as being constituted by their geohistories). Bhaskar thinks that forms of contradiction and dialectic dominate this dynamic of existential constitution. He introduces several different types of contradiction which we will consider in turn. There are internal contradictions (including formal logical contradictions, dialectical contradictions and logical dialectical contradictions), dialectical connections, external contradictions and existential contradictions.

Bhaskar defines the concept of contradiction as follows:

The concept of contradiction may be used as a metaphor (like that of force in physics) for any kind of dissonance, strain or tension. However it first assumes a clear meaning in the case of human action, which may then be extended to goal-oriented action, and thence, by a further move, to any action at all. Here it specifies a

situation which permits the satisfaction of one end or more generally a result only at the expense of another: that is, a bind or constraint.

(Bhaskar 1993a: 56)

Internal contradictions<sup>2</sup> refer to the *self-imposed* constraints of something. This means that the source of an object's powers of negation (the rhythmical processes that inhere in it) is to be found within it:

An *internal contradiction* is then a *double-bind* or self-constraint ... In this case a system, agent or structure S, is *blocked* from performing with another, R'; or, a course of action, T, generates a countervailing, inhibiting, undermining, overriding or otherwise opposed course of action, T'. R' and T' are radically negating of R and T respectively.

(Bhaskar 1993a: 56)

It may be concluded from this that if the rhythmical processes that govern the causality of an emergent thing are internal to it then the processes of transformative negation are said to be internal. An example of this would be the internal contradiction that one could identify in the fairly standard Marxist analysis of ruling classes throughout history. The activities (T) of the bourgeoisie in capitalism, just like the class of feudal landlords before them, have the effect of generating a radical and revolutionary class whose class interests and activities (T') correspond with the destruction of the ruling class that created them. In the case of capitalism this class would be the proletariat, which itself contains internal contradictions that are probably the most pronounced of all (because, Marxists argue, its own class interests correspond with the destruction of all class relations – a level of internal class contradiction that has been hitherto unheard of in human history). And so a necessary feature of the implementation of the class interests of a ruling class is the generation of the conditions for its own abolition. If we were of a Marxist mindset, we would conclude that the rhythmical emergence of the causal generative mechanisms characteristic of ruling classes is governed by a process of contradiction internal to them. These contradictions are essential to the absence/presence bipolarity according to Bhaskar because 'it is possible to construct an argument to show that for the very fact of change to be possible, internal contradictions are necessary' (Bhaskar 1994: 85). And because change is bound up with the formation of emergent entities, we can begin to see that without the DCR concept of contradiction CR itself is incomplete.

We cannot leave it at that because internal contradictions can take the form of dialectical contradictions, or formal logical contradictions. Before we discuss these types of internal contradiction we need to introduce a more general *non-contradictory* concept of internal relations

which is basic to the Third Level (3L). For instance, Bhaskar tells us that dialectical contradictions 'may be best introduced as a species of the more general 3L category of dialectical connections' (Bhaskar 1993a: 58; Bhaskar 1994: 86). Dialectical connections are internally related objects or structures known as a *totality*. Rhythmics are engaged in internal relations with each other within totalities, requiring *mediation*. Bhaskar uses the example of how Marx conceptualised the relation between human beings and nature as being mediated by labour (Bhaskar 1993a: 113–4). In section 5.3 we will see the importance of considering rhythmical processes as being engaged in mediated relations of internality in Marx's social dialectics. We will see that Bertell Ollman's definition of Marx's categories as *relations* is central to our understanding of the latter's critique of capitalism. We will see that all categories are what they are by virtue of their relations with others, making the attempt to draw fixed definitions of them impossible. In this regard, their mediating function within the totality in which they inhere is central to their very existence.

Internal relations take the form of existential presupposition. This may be either symmetrical or asymmetrical. An example of the former might be class relations – the bourgeoisie could not exist without the proletariat and vice versa. But the same is not true of, say, the relations between a doctor and his or her patient. The patient must existentially presuppose the doctor otherwise he or she would just be a person suffering from some sort of medical ailment but the doctor does not, strictly speaking, need any patients but merely a medical degree to be worthy of the title 'doctor'. In this case, the internal relations are of asymmetrical existential presupposition. In both cases there is existential presupposition of some form in the sense that to a greater or lesser extent they are distinct but inseparable (Bhaskar 1993a: 58). And so dialectical connection is the general category that constitutes the third level (3L) of DCR, which Bhaskar defines as 'systems of internally related elements or aspects' (Bhaskar 1994: 75). An object A is said to be internally related to B (therefore forming a totality) 'if it is a necessary condition for the existence (weak form) or essence (strong form) of B whether or not the converse is the case' (Bhaskar 1994: 75). It is by virtue of dialectical connections that emergent spatiotemporal strata and their causal mechanisms are said to intra-act in a *holistic causality* (Bhaskar 1994: 77). As Bhaskar explains, 'I will argue, when I come to totality and holistic causality, that emergent social things are existentially constituted by or contain their relations, interconnections and interdependencies with other social (and natural) things' (Bhaskar 1993a: 54). He gives us a more complete definition of totality later on in the text:

To grasp totality is to break with our ordinary notions of identity, causality, space and time . . . It is to see things *existentially*

*constituted*, and permeated, *by their relations with others*; and to see our ordinary notion of identity as an *abstraction* not only from their existentially constitutive processes of formation (geo-histories), but also from their existentially constitutive inter-activity (internal relatedness). It is to see the causality of a upon b affected by the causality of c upon d. Emergent totalities generate emergent spatio-temporalities . . . I am going to argue for spatio-temporal, social and moral (real) relationism; in the domain of totality we need to conceptualise *entity relationism*.

(Bhaskar 1993a: 125)

In this way, the 2E dialecticisation of 1M categories of emergence depends in turn upon the 3L process of what Bhaskar calls 'entity relationism'. Now, entity relationism has various important aspects. By existential constitution Bhaskar means that objects depend for their existence on their connection with others in relations of 'formation' and 'interactivity'. The 'constitutive processes of formation (geohistories)' is interesting here because Bhaskar thinks that when we talk about the absencing processes intrinsic to existential constitution we cannot avoid the conclusion that emergent entities, structures and objects are definable in terms of what they are the (natural or social) historical negation of. In other words, because a rhythmic represents the negation of some previous state of affairs it makes sense to say it is the product of a historical process and that it can only exist as a 3L totality by virtue of this. (We will see in a moment and in more detail in Chapter 4 how Hegel is again important here because what Bhaskar is getting at is something very similar to Hegel's theory of *preservative dialectical sublation*.) This means that natural and social phenomena are not only processes-in-products but also *processes-in-products-in-processes*. In other words, objects contain the constitutive presence of past forms of them (geohistorical constitution) while engaged in a continual process of activity aimed at the negation of their current state of existence. This clearly makes the flat ontology of philosophies that deny the realm of real causal structures inadequate:

The pre-existing/ongoing character and multiplicity rhythmic in social life entails that entities such as people and institutions will typically have the character of processes-in-products-in-processes. There is a need here to construct much more complex ontologies than the simple shallowness of atomism and closure, generating actualist-monovalent-extentionalist and in practice reductionist . . . and/or complexificationist . . . regresses, would permit.

(Bhaskar 1994: 77)

Let me use an example. Under the terms of EC, freedom can only be understood as the remedy (i.e. totalisation) of detotalised slavery. Each

rhythmic, by virtue of the bipolarity of absence and presence within it, will often be existentially constituted by its geohistory (Bhaskar 1993a: 54). Bhaskar uses an example of a mountain cliff sedimentally stratified by the layers of different geohistorical epochs and an individual whose identity is determined by social institutions that have developed over generations in accordance with the TMSA (Bhaskar 1994: 68). Specifically, there are two modes that are relevant in the assertion that the past may be present in a process-in-product or rhythmic: existential constitution and *existential pre-existence* (when an entity is dependent on an absented object for its existence, as in TMSA).

According to her theory of morphogenesis Margaret Archer has shown that in order for us to distinguish between agency and structure in a way that avoids the reduction of one to the other – a central condition placed on the coherence of Bhaskar's TMSA – we need to give analytical primacy to relational factors of positions. The only way such primacy can be given is if we consider that the majority of social actors are in fact dead. She argues that the activity and concept dependence of positions can be attributed to the *past activities* of agents (possibly now dead) rather than to those of *current agents* who retain the capacity to transform positions in accordance with TMSA. Thus, the material context in which practices arise is one of inherited structural and cultural conditions that are then transformed by the agents who confront these pre-existing conditions and whose practices are in turn changed and reshaped by the act of this transformation (Archer 1998: 201). This therefore explains the causal interdependence of structure and agency while at the same time establishing their existential distinctions. This means that change to the social structure and to agents is a fundamentally temporal process 'because *given* structures and *given* agents stand in temporal relations of priority and posteriority to one another' (Archer 1998: 202). And so Archer contends that the mundane analytical dualism of activity-dependence and concept-dependence (i.e. the simple fact of the dependence of society on agents' activities and conceptions of what they are doing) must give way to the much more epistemically interesting form that this tensed process takes, which is a conception of activity and concept dependence based on the following temporal cycles: 'structural conditioning–social interaction–structural elaboration' (Archer 1998: 202) and this is known as *morphogenesis*.

I think that this is a good example of how the past is a real feature of entities, structures and objects understood as totalities. The logic of empirical realism, on the other hand, excludes the existence of the past by virtue of its denial of real negation and Bhaskarians see this as the *existential irrealist* corollary of actualist ontology (or what we have called subjectivistic deontologisation). Existential irrealism results from tensed irrealism, that is, irrealism about the temporal orders in which events or the processes causing events occur.

We will discuss the implications DCR has for the wider CR critique

of actualism in a moment. For now it is enough to state that this clearly contextualises the pre-DCR notion that outcomes in the social and natural world are determined by infinitely complex and interacting generative mechanisms of different objects by asserting that this interaction takes the form of a holistic causality within a totality. In the case of emergent phenomena's existential constitution we must employ (at least) the general principle that they are engaged in relations of dialectical connection. When it comes to the investigation of the conditions of their formation we enter into the conditions that are a subcategory of dialectical connection, namely dialectical contradiction, wherein the absence–presence bipolarity (and hence heterology) is at work. In fact, Bhaskar thinks that when we apply 1M CN terms we are transforming the pre-DCR term *inter*-action into the DCR term *intra*-action (Bhaskar 1993a: 58). All that this involves is taking the CN principle that the character of emergent strata is dependent on the causal impact of mechanisms of other emergent entities and dialecticising it – by understanding the multidetermined nature of emergent entities in terms of holistic causality. As such, transforming *inter*-action into *intra*-action will involve 'existential constitution . . . , permeation (presence within) . . . or just connection (causal efficacy)' (Bhaskar 1993a: 58; see also Bhaskar 1994: 75–6). Bhaskar is alluding to the different ways elements of a totality *intra*-act. Existential constitution involves a type of *intra*-action when 'one element or aspect (moment, determination, relation etc.), e2, is essential and intrinsic to . . . another, e1' (Bhaskar 1993a: 123). Permeation occurs when 'e2 is present within, although not essential to the nature of, e1, the sense in which e1 may be said to contain e2' (Bhaskar 1993a: 123). And connection occurs when 'one element, e2, is causally efficacious on an element internally related to it, e1' (Bhaskar 1993a: 123).

An example of a dialectical connection that Bhaskar draws our attention to is the base–superstructure relation in Marxism. On the one hand, 'the polity . . . may be regarded as setting the boundary conditions for the relations of production, which in turn set the boundary conditions for the forces of production (including science), the development of which initiates or enables transformation in the relations of production' (Bhaskar 1994: 75). On the other hand, 'the economic base may be regarded as setting the framework conditions of possibility within which cultural traditions and tendencies . . . mature or decay' (Bhaskar 1994: 75). The phrases 'boundary conditions' and 'setting the framework conditions of possibility' refer quite clearly to *intrarelations* of existential presupposition. Thus, in periods of relative stability and development the relations between the productive forces, production relations and ideological superstructure assume those of dialectical connection.



I wish to emphasis this relative stability here because I think it is fairly important in helping to distinguish between dialectical connections and dialectical contradictions. Notice that Bhaskar is not using the term *dialectical contradiction* as a necessary feature of a totality. All that he is saying is that a totality must at least be governed by existentially constitutive relations of intra-action with other spatiotemporal entities – it must at least conform to the features of a dialectical connection.<sup>3</sup> There are no necessary relations of opposition or conflict. To use the example of class relations again, someone might argue against Marxism that the bourgeoisie and proletariat are involved in relations of dialectical connection rather than contradiction because although there is symmetrical existential presupposition, there is little or no evidence that the latter, by its very nature, seeks the negation of the former. On the other hand, dialectical contradictions are special instances of dialectical connections where opposition is an important feature of their relations of existential presupposition:

Real dialectical contradictions possess all these features of dialectical connections. But their elements are also opposed, in the sense that (at least) one of their aspects negates (at least) one of the other's, . . . so that they are *tendentially mutually exclusive*, and potentially or actually tendentially transformative.

(Bhaskar 1993a: 58)

In *PE* Bhaskar says that dialectical contradictions 'are typically radically . . . negational . . .' (Bhaskar 1994: 86). In these conditions relations of holistic causality become contradictory. This is vitally important to the relation between CR and DCR because it is now that new emergent entities/objects/structures appear. Using our base–superstructure example above, it might be said that, given a certain stage of development of the productive forces, their intrarelations with the production relations assume the character of dialectical contradictions because their relations of existential presupposition take on a contradictory character. The productive forces cannot exist without a particular form of production relations but they also seek the negation of those relations and the emergence of new ones. In this sense, the relations of intra-action assume a dialectical contradiction because, when the relations can no longer provide for the further development of the forces, their relations of existential presupposition are indivisible from their relations of *tendential mutual exclusivity*. As I have said above, in these instances relations of existential connection develop negational aspects to them thereby transforming the intrarelations into dialectical contradictions.

Finally, formal logical contradictions are a species of internal contradiction but differ from them in that there are no intraconnections



of existential presupposition between strata. They also differ from dialectical contradictions in that even though their internal relations are contradictory the causal rhythmical effects of their inter-action do not involve negation or, as Bhaskar puts it, they are indeterminate in terms of negation (Bhaskar 1993a: 57–8).

Two important concepts that link intra-action within any sort of totality to the CN theme of the irreducibility of emergent phenomena are constellationality and duality. Bhaskar breaks the concept of constellationality into two main parts:

*'constellational identity'* . . . is essentially a figure of *containment* (in the sense of being part of) and *'constellational unity'* . . . is essentially a figure of *connection* (in the sense of being bound together) . . . Thus one can write, within a materialist context, of the constellational identity of being and thought in the sense that thought is both (a) within being, but (b) overreached by being, as (c) an emergent product of being.

(Bhaskar 1993a: 114–5)

Bhaskar is establishing the emergent status of thought in its relation to being. There is constellational identity between thought and being in the sense that the former's emergent status means that it is at once contained within and over-reached by being. This means that relations such as those between thought and being are going to be those of a *duality*:

Duality normally connotes the *combination of existential interdependence* (or, even sometimes at some ontological level and/or from some perspective, identity) and *essential* (and therefore conceptual) *distinction* (including, at the limit, autonomy). It may be exemplified by the duality of absence and presence in spatio-temporal mediation, of theory or practice in absolute reason, or of structure and agency in social practice – where the figure of the *hiatus-in-the-duality* makes possible such important phenomena as dislocation, as well as preventing voluntaristic or reificatory collapse, of the dualities.

(Bhaskar 1993a: 115)

Duality simply refers to the intrarelations of existential dependence (symmetrical/asymmetrical) and distinction that prevail between components of a totality, such as that between structure and agency in social practice (symmetrical) or thought and being (asymmetrical). In such conditions we have a hiatus-in-the-duality whereby it is impossible to reduce one to the status of an epiphenomenon of the other.

When dialectical contradictions take hold, then relations of duality assume a negational character. It is in these situations that the

emergence of new entities with attendant causal mechanisms occurs. What this means is that emergence can only happen when dualities generate *detotalisation* – alienations, splits, anomalies and contradictions within internally related objects. And so 3L detotalisation provides the impetus for 2E transformative negation or the absencing of detectable absences (e.g. in classic Marxist discourse, the absence of socialistic relations of production in conditions where new technologies demand it). If everything at 3L were always in a state of perfect totality, then there would never be heterological relations. As Bhaskar argues ‘totality seeks to exclude heterology and to embrace all in a unity (albeit of differentiated aspects)’ (Bhaskar 1993a: 121). It is because we can detect splits, alienations and contradictions that change is possible and, if change is understood in terms of emergent causality, then it is not difficult to see how important 3L is to CR. As Bhaskar argues, ‘an absencing alienation, absented alienation, splitting detotalisation or split-off can exercise a causal effect’ (Bhaskar 1993a: 52–3).

Aside from internal relations we must also mention *external* relations. Bhaskar doesn’t really mention them in any great detail in DPF but can assume that they refer to things not constituted by their ties to other social and natural things. In other words, there are separate totalities which are connected only contingently.<sup>4</sup> External contradictions obviously differ from internal contradictions in that the source of change in a totality comes from outside. Bhaskar defines them as binds or constraints placed on things from without (Bhaskar 1993a: 57; Bhaskar 1994: 85). We have seen how Bhaskar is sure that without internal contradictions change is not possible. Nevertheless, he thinks that external contradictions are important because quite often the impetus for internal change comes from a source external to the totality in question.<sup>5</sup> Thus, internally related things (totalities) cannot be completely impervious to the causal impact of spatiotemporalities from without:

even if the source is exogenous, there must be a degree of internal ‘*complicity*’ within the thing to the change; that is, in that it must, in virtue of its nature, be ‘*liable*’ to the change, so as not to be impervious to its source, and so must possess a counter-conative tendency in respect of the condition changed, which may be more or less essential to the thing’s identity . . . Only unchanging, ultimately eternal, things would lack such a tendency and such things would seem to have to be or contain everywhere everywhen – a Spinozan monism Leibnizian monadism.

(Bhaskar 1993a: 57)

In this passage Bhaskar is making the case for the potential for existential contradiction in all things. Even when it is an external force which forces things to change, it is only because they have an internal

tendency to *be* changed. This is crucial because it establishes the basic feature of all things – their finitude:

In any case this [internal liability to change] establishes the most basic kind of *existential contradiction*: finitude. Spatio-temporal location may seem an external constraint, but insofar as it is the fate – condition of being – of such things to perish, i.e. to be limited in extent, it must be reckoned an internal contradiction, even though their extent and duration be entirely contingent. When we turn to human life, existential contradiction may assume the mantle of standing oppositions between mind and body, fact and fancy, desire and desired, power and need, Eros and Thanatos, master and slave, self-determination and subjugation.

(Bhaskar 1993a: 57)

*Existential contradiction* is therefore the crucial feature of both internal and external contradiction for without the intrinsic finitude of all things – their tendency to negate themselves as a condition of possibility of their very existence – then no change would be possible.

An example of existential contradiction that is of relevance to the social world is what Bhaskar calls *master-slave(-type) relations* which are ‘poles of . . . antagonistic dialectical contradictions, exemplified by the famous contradictions between capitalist and worker or the looker and looked at or master and slave itself’ (Bhaskar 1993a: 60). He calls these *power2* relations of domination and control (where *power1* relations refer simply to the transformative capacity of human agents to affect change through actions). In all of this we enter the *fourth dimension* (4D) of Bhaskar’s dialectic, in which human action is the ultimate motor of change in the social world, and so it is to this that we must now turn.

### 2.2.3 *The driving force of change in the social world: the fourth dimension transformative praxis*

That 4D is a necessary product of 3L should make perfect sense to us. If 3L involves the process of totalisation, then we are essentially talking about the formulation of new philosophical accounts of reason and rationality. We begin to understand that slavery represents some fundamental human injustice and construct philosophical arguments that uncover the truth of just how alienating and dehumanising it really is. Bhaskar refers to this process at 3L as ‘at once the inner truth or pulse of things’ (Bhaskar 1993a: 9), the stage at which new levels of philosophical and scientific sophistication emerge, by which I mean those that are closer to the truth. But he immediately declares that this is also ‘the spot from which we must act, the axiological moment . . . 3L

is not the end of the matter. A fourth dimension (4D) is required – for the critical realist totality is radically open. So we must return to practice' (Bhaskar 1993a: 9). And so these new revelations of truth that are designed to overcome detotalisation by absencing crucial absences are dependent on human beings taking transformative action in the world. Ontic change in the human world is dependent on human agency. As Bhaskar states 'ontic change (and hence absence) must occur in a world containing human agency' (Bhaskar 1993a: 44). But epistemic change in the form of argument must also be possible by virtue of agency. Bhaskar continues 'epistemic change must be possible and necessary too' (Bhaskar 1993a: 44). 4D therefore represents the essential unity and interdependence of theory and practice, both ontic and epistemic. And so we can see now how all four sides of DCR are in relations of presupposition. 4D presupposes 3L, which in turn presupposes 2E, which presupposes 1M (Bhaskar 1993a: 9).

Bhaskar contends that there is a fourfold nature of the social dialectic known as *four-planar social being* or the *social cube* (Bhaskar 1993a: 160). They are the planes of (a) material transactions with nature; (b) interpersonal intra- or inter-action; (c) social relations; and (d) intra-subjectivity (Bhaskar 1993a: 153). Now, we have seen that Bhaskar regards transformative praxis as the intervention of human beings in the social world to change a state of affairs that prevail. Towards the end of chapter 2 in *DPF*, Bhaskar outlines his social dialectics and states what I have already alluded to regarding TMSA, namely that 'the mechanism at the core of critical naturalism . . . TMSA, is a model of transformative praxis, *absenting* the given (and typically *driven* by and *against* absence)' (Bhaskar 1993a: 152–3). He wants to show how TMSA is:

a model of *transformative negation* . . . incorporating . . . the intra-active relational and geo-historical processual constitution of social products (people, institutions, etc.); and how the two-way interlocking pair of transcendental arguments necessitating a conceptualisation of the duality (with the vital hiatus) of structure and agency establish, on the one hand, ( $\alpha$ ) in the argument from agency to structure, the possibility of a *dislocated dialectics of structure and agency*, and, on the other, ( $\beta$ ) in the argument from structure to agency, through the theorem of the necessary embodiment of intentional causality, the inexorable spatio-temporality of social life, and a fortiori its processual (and contingently globalising) character. ( $\alpha$ ) connects to the refrain of the presence of the past, ( $\beta$ ) to that of emergent and differential rhythmicity. Significantly ( $\alpha$ ) portends the *negative* (and other) *generalisations of the TMSA*, which, in my initial formulations of it, still bore the imprint of ontological monovalence.

(Bhaskar 1993b: 153)

The irreducibility of structure to agency, and vice versa, that is basic to TMSA establishes the possibility of a dialectical hiatus-in-duality between them. On the one hand, we can establish the existential independence of structure from agency because we have 'a dislocated dialectics of structure and agency' which 'connects to the refrain of the presence of the past' (i.e. Archer's argument about the inherited structural and cultural conditions that confront agents). On the other, 'intentional causality' establishes 'the inexorable spatiotemporality of social life' (i.e. that the dynamic of change is provided by intentional human praxis). A little further on in the section Bhaskar restates the common CN theme that social structure is dependent on 'intentional embodied human agency', thereby placing limits on naturalism. But he now couches it in DCR terms. Social structures are 'autopoietic, conceptualised and geohistorically dependent':

The activity-dependence of social structures entails its auto-poietic character, viz., that it is itself a social product, that is to say, that in our substantive motivated productions, we not only produce, but we also reproduce or transform the very conditions of our production. The same premise, of intentional embodied human agency, grounds both the conceptuality and the geo-historicity of social structures. (In both cases the relation is one of dependence not identity.) Thus we can situate the *auto-poietic, conceptualised and geo-historically dependent* character of social structures alongside their *social relation dependence* as four ontological limits on naturalism.

(Bhaskar 1993a: 156–7)

In other words, it is the dependence of social structure on intentional agency that grounds the possibility of change in the social world. It is transformative praxis within the context of TMSA that establishes the possibility of 'emergent and differential rhythmic' in the social world. An example of this is the transformation of capitalist production relations into socialist ones. We have also seen how 4D transformative praxis involves absence; i.e. the causal efficacy of human agency directed towards absencing capitalism. In the context of transformative agency, Bhaskar extends the definition of an absence in the 2E domain of negativity to include ill-being because it is the existence of the absence of some human need. As Bhaskar states in the quotation above, the existential dependence of agency on structure 'portends the *negative* (and other) *generalisations of the TMSA*'. It is this dependency that allows for the perpetuation of structures that frustrate some important human need. Social actors are constrained to working within social structures that frustrate essential human freedoms. But its converse – the dependency of structure on agency – allows for the possibility of

agential transformative praxis to eliminate them. We are now getting to the heart of the DCR project applied to the social world – uncovering the emancipating potential that giving core CN categories a logic of the negation of absences has. Bhaskar calls the absencing of ill-being by transformative praxis the *axiology of freedom*. In accordance with the CN contention that conscious praxis establishes that reasons for acting can be causes, we can see how the transformative praxis directed towards the negation of ill-being can provide such praxis with an emancipating potential in society.

A good example of ill-being is slavery. It is because slavery contains obvious splits, alienations and contradictions that action is taken to liberate humankind. We recognise a fundamental absence of well-being and take action to remedy it. The impetus for the correction of errors and lacking is the detection of detotalising processes and the desire to return to the coherent totality. In other words, we take action to absent the absences (e.g. of coherent theories or freedom) that are the root cause of logical dialectical and/or dialectical contradictions in specific (de-)totalities. And so, just as 3L is implicit in 2E, so the fourth aspect of Bhaskar's four-sided dialectic is evident in 3L. In the domains of epistemology and social ontology, transformative agency is important to the overcoming of detotalisation. Thus, 4D as such concerns the absencing of absences in the human world via human praxis.

The conditions that create ill-being are closely tied to the social cube. The plane of interpersonal intra- or inter-action involves, of course, power1 relations. However, they can also contain power2, which is the 'ideologically legitimated or discursively moralised . . . transfactually efficacious capacity to get one's own way against either (i) the overt wishes and/or (ii) the real interests of others (grounded in their concrete singularities)' (Bhaskar 1993a: 153). By 'concrete singularities' Bhaskar simply means the 'core species being' (Bhaskar 1993a: 395) of individual human beings – the essential characteristics of their humanity. A good example of concrete singularities and power1 relations would be Marx's humanist concept of expressive forms of labour, free from relations of domination, that is the condition of possibility of the eudemonistic (i.e. emancipated and free) society. The converse of this – alienated labour perpetuated by ideologically legitimated relations of domination, exploitation and control – is evidence of power2 relations. It is power2 that establishes 'generalised master–slave type relationships from class and gender to age and ethnicity' (Bhaskar 1993b: 153–4).

I said above that power1 and power2 relations were poles of a dialectical contradiction between, for example, employer and employee in capitalism. As such, they constitute a detotalisation. But Bhaskar draws our attention to an important proviso. The possibility of absencing the split in the (de-)totality depends on structural asymmetries that characterise power2 relations between, say, worker and capitalist. Unless



the dialectical contradictions between worker and capitalist assume relations of subordination and domination, then transformative praxis and hence change is impossible:

In such cases one may talk of a dominant and subordinate pole; and more generally of the primary and secondary (etc.) aspects of a contradiction or contradictions in a totality. Indeed unless, more generally, there were *structural asymmetries* in a multi-angular pluriversal context, it would be difficult to conceive, against inertial drag, causes of change, let alone of directionality, in geo-history.  
(Bhaskar 1993a: 60)

Rhythmical processes of geohistorical change are therefore dependent on power<sup>2</sup> dialectically contradictory relations of structural asymmetry.

Now, we have seen that for Bhaskar these relations are 'ideologically legitimised or discursively moralised'. This will commonly take the form of what he calls a *TINA* ('there is no alternative') *necessity* (Bhaskar 1993a: 116). *TINA* necessities arise when those with vested interests in perpetuating power<sup>2</sup> relations require ideological or moral reasons to frustrate change in the social world. *TINA* formations are necessary to counter those who formulate sound arguments that radical change is necessary (revealing an axiological imperative) in order to deliver, for example, social justice:

But what happens . . . if a transcendental or dialectical necessity, established (let us suppose) by sound argumentation, is contravened? To contravene such a necessity, in some theory or practice, is, insofar as the necessity pertains to the world in which we must act, to contravene an axiological (or practical) necessity too. I am going to call such necessities . . . a *TINA* ('there is no alternative') *necessity* imposing *TINA* imperatives.

(Bhaskar 1993a: 116)

Bhaskar then lists the important components of a *TINA* formation:

Theories and practices which violate such necessities, if they are to survive and be applicable to the world in which we must – in virtue of the axiological imperative – act: (a) require some defence mechanism, safety net or security system, which may well, in systematically related ensembles, (b) necessitate supporting or reinforcing connections, in the shape of duals, complements and the like elsewhere, and (c) need to assume the cloak of some conjugated compromise formation in a world where axiological necessities press

about them. Such mechanisms, connections and formations are Tina ones and the whole complex comprises the 'Tina syndrome'.  
(Bhaskar 1993a: 116)

In other words, repressive social, economic and political systems that establish power2 relations require strong defensive state security systems and accompanying sets of values and beliefs that have the appearance of a 'compromise formation' but which function to 'cloak' the fact that they frustrate human freedom. Bhaskar refers to them as 'the ontological necessity of false (or limited) categories of results, as is exemplified by Marx's analysis of the wage (false) and value (limited) forms' (Bhaskar 1994: 94) – power2 relations that depend on false and repressive ideologies. Thus, anticapitalist discourse conceptualises capitalism as involving dialectical contradictions of power2 relations and liberal democracy as its attendant TINA compromise formation, with many of liberalism's proponents justifying dehumanising conditions of existence for the vast bulk of humankind with reference to TINA. (Furthermore, they often claim that the end of the Cold War and the collapse of Soviet communism proves that 'there is no alternative' to capitalism.)

Remember what we said in our discussion of EC about the assertoric imperative in social science. Through the analysis of a theory–practice inconsistency of a social structure or object (i.e. a social institution), which depends upon sustaining such an inconsistency, we get the identification of a human need that is being absented through the perpetuation of false beliefs. This implies that there are such things as true beliefs and if an agent comes to recognise the falsity of a belief or value he or she had about that institution, then he or she acts to negate that institution and hence absent the absence of some human need. In this way EC can be said to provide us with a model of the objectivity of true morals and values while recognising that those of specific societies can (and more often than not, do) differ from this objectivity (Collier 1998: 692). Acting on the basis of a truth about some ill-being the agent acts to transform that set of conditions.

It is obvious that absenting such a constraint is liberation. Thus, the process of social change to a state of freedom involves relations of opposition between groups of agents who wish either to protect the institutional sources of constraint or to abolish them. We have seen that the capitalist–worker relation is an internal contradiction in which relations of symmetrical existential presupposition (dialectical connections) and asymmetrical negation (the worker has a tendency to seek the negation of the relations that perpetuate the existence of the capitalist) prevail. They therefore have a tendency to be mutually exclusive (dialectically contradictory). Bhaskar calls the workers' tendency to



negate the power<sup>2</sup> relations that sustain them *hermeneutic struggles over power<sup>2</sup> relations* (Bhaskar 1994: 87). The real relationship of dialectical contradiction between worker and capitalist which perpetuates ill-being has been uncovered by evaluative social scientific analysis of the sort characteristic of EC, thus exposing the false beliefs propagated by the capitalist in an attempt to reify capitalist social relations. To expose such falsities is to highlight a theory–practice inconsistency and is formally known as *immanent explanatory metacritique*.

In this way the epistemological differences between the natural and the social world – in that social structures and entities require conceptualisation (be it true or false) by the agents involved – that are central to the CN thesis are crucial to power<sup>2</sup> struggles. At the level of 4D transformative praxis Bhaskar constructs a sequence involving 2E absences of (a) dialectics of opposition and (b) rhythemics within a 3L totality. We start with desire (the absence of something). This involves referential detachment characteristic of immanent EC (i.e. to expose a theory–practice inconsistency via EC). We can thereby establish the ontological truth of the state of affairs that constrain some or other freedom (known as the *alethic* truth of a stated desire<sup>6</sup>). It is in the context of internally related contradictory differentiated and stratified entities and structures where *emergent powers materialism* (EPM) formulates new phenomena of the social world. The resolution of these contradictions lies in 4D transformative praxis by the agent who reconstructs social relations that absent the absence of the desire. Bhaskar calls this ‘de-alienating retotalisation in a unity-in-diversity’ (Bhaskar 1994: 166). That is, dialectical contradictions are absented and social relations are ‘retotalised’ in new configurations of ‘unity-in-diversity’ where contradictions are not identified although they may exist.

It is in the context of totalities in which hegemonies are prevalent, such as in capitalist social relationships, that hermeneutic hegemonic/counter-hegemonic struggles are engendered (Bhaskar 1993a: 62). Such conditions are central to Marx’s analysis of the wage-form in which theory–practice inconsistencies are ontologically necessary, a necessity that is established by the TR contention of transitive and intransitive realms. In contexts of hegemonic relations it is necessary that the leading (or ruling) class attempt to reify an essentially finite social structure that protects the status quo, and so commits a theory–practice inconsistency, and for the workers to attempt to negate it:

A dialectical explanation typically explains some tendency or outcome in terms of a dialectically contradictory ground or condition of possibility or some complex, combination or totality of them. As a complex may be hierarchicized, this opens the way for concepts of hegemony and counter-hegemony, and a fortiori for counter-hegemonic hermeneutical struggles. It also lays the grounds for dialectical arguments, where a *dialectical argument* is a species of

transcendental argument characterised by the condition that it establishes the ontological necessity of false (or limited) categories of results, as is exemplified by Marx's analysis of the wage (false) and value (limited) forms.

(Bhaskar 1994: 94)

Thus, in all of this we can see that Bhaskar bases this conception of the emancipating potential of absencing transformative praxis on the objectivity of morality and the reality of alienation of human beings from the human species being. It is obvious that Bhaskar's idea of alienation is informed by the humanist Marxist conception of human estrangement from the product of labour. It is equally obvious that what is characteristic of CR is the combination of this moral realism with CN, and we have seen how this is done above in our discussion of how values can be derived from facts, the is-ought divide, and so on. We have seen how social science can be seen as maximising the explanatory power of social scientific discourse by denying its evaluative neutrality (contra-positivism), on the one hand, and affirming the ontological status of real morality (contra-hermeneutics), on the other. According to this ethical naturalism, therefore, social science is an emancipating axiology (Bhaskar 1994: 110). Social scientists are therefore committed to a dialectical solidarity with people who are denied some human need. They are as committed to non-alienating praxis as the agents themselves.

In drawing attention to a possible humanist influence on DCR I am not trying to claim that Bhaskar was influenced by some sort of abstract conception of the human essence. With the publication of Marx's early pre-historical materialist writings such as the *Economic and Philosophical Manuscripts* (EPM; 1844), we might be tempted to conclude that his theories on alienation are tantamount to a view of human beings that is informed by what I call in later chapters *strong* apriorism (see Chapters 4 and 5) and which is incompatible with the alleged scientific methodology of his subsequent work. But as we will see in Chapter 5, the dialecticisation of Marx and Engels's emergentist and stratified materialism opens up the possibility of arriving at conceptions regarding human nature (e.g. the identification of essential human needs and entitlements) via a consistent process of philosophical deduction from the study of the material world (what I call *weak* apriorism). Again, Bhaskarian DCR categories will be of considerable use in this endeavour because I think that they operate under the same principles. By way of an introduction to what is to come in later chapters, I cover the basics of these important methodological themes in section 2.3 below.

Before we proceed in that direction a brief recap on what we have learnt thus far is needed. The domain of the real (1M) presupposes the category of absence (2E). Real entities and structures are created by causal processes and we have seen how causation is change and how

change is an absenting process. Thus, absence is determinate of being in this analysis, what Bhaskar calls the 'ubiquity determinism' that is characteristic of absence (Bhaskar 1994: 165). Causal realism and thus absence, in turn, presuppose rhythmical processes and totalities (3L). The causal impact of an object or entity in open systems depends on its spatiotemporality. Thus, the process of change (rhythmic) must be a spatialised, tensed process. Bhaskar calls the spatiotemporality of an object or entity's causal powers the 'intra-cosmic constellational identity with the mode of manifestation of time' (Bhaskar 1994: 165), which means basically that the emergent causal powers of an object that define its identity are dependent on the spatialised tensed processes characteristic of a particular geohistorical moment in time. We have seen that internally related rhythmicity occurs in a 3L totality. Therefore, in terms of scientific inquiry, the study of rhythmicity must presuppose a *taxonomic realism* – the contention that phenomena such as a person's identity are an internal causal relationship (1M) between many rhythmicities (2E). And we have already seen the ontic change that transformative praxis (4D) is capable of.

I now want to widen the terms of the discussion somewhat to take into account the main purpose of this project – to understand DCR in relation to the development of Western philosophy, culminating in the vitally important progression from Kant to Marx and Engels via Hegel. In what immediately follows I will attempt a brief introduction to themes on which I will elaborate considerably in the coming chapters to provide readers with some contextualisation of DCR in terms of the history of philosophy.

## 2.3 Dialectical critical realism and the history of philosophical irrationalism

### 2.3.1 *Subjectivistic deontologisation and ontological monovalence from Plato to Hegel*

The net result of the addition of 2E–4D to the CR system is a much greater degree of fluidity. As Bhaskar says '[w]e begin to envisage dialectic as the great "loosener", permitting empirical "open-texture" ... and structural fluidity and interconnectedness' (Bhaskar 1993a: 44). If we do not acknowledge the basic truth that all things are intrinsically bipolar it is because we think that our subject matter (including ourselves) is fixed; we do not realise that the very thing that makes us as human beings, what and who we are, is lost, namely that we are 'necessarily *acting and so absenting*' (Bhaskar 1993a: 44) beings. We may use the characteristic Marxian notion that the defining characteristic of our humanity is our agency – our powers to have causal impact on the social and natural environment around us that are unlike those of the rest

of the animal kingdom.<sup>7</sup> But what can this involve if not the powers of absenting, of changing the world around us, and us in the process? But we have already briefly mentioned how subjectivistic deontologisation has necessitated the denial of absence. It seems that Western philosophy from Plato to Hegel (but not Marx or Engels, as we shall see) has divested absence from theories of human agency. To deny absenting powers while to permit agency is a contradiction in terms, a fundamental contradiction between human practice and the theories concerning human agency. Bhaskar contends that '[n]ot to admit absence to our ontology (in that very admission) is to commit *performative contradiction*, the basic form of theory–practice contradiction and reflexive contradiction, and self-referential paradox' (Bhaskar 1993a: 44). In this way, as we have seen, it is vitally important that CR theories of stratification and emergence in the domain of the human sciences be understood in terms of real absenting praxis. And so when we are talking about the emergence of new strata with new real causal powers in SEPM we are not just talking about positive material things but also, and as their condition of possibility, negativities that are intrinsic to them (although it is only in the social world that human agency will provide absenting dynamics). Entities, structures and objects must be considered as spatiotemporalities. This is important because it explains why Bhaskar thinks that the empirical realists cannot sustain the concept of absence. The main reason for this is because they commit the error of subjectivistic deontologisation. We saw in the last chapter that this involves the denial that anything non-actual or non-empirical can possibly exist. An absence has to be understood as belonging to the domain of the real as well as the actual and empirical. The necessary denial of real absence under the terms of their own subjectivistic ontology commits empirical realists to what in DCR language is called *ontological monovalence* (Bhaskar 1994: 55). Bhaskar clearly associates actualist ontology with monovalent ontology in *DPF*. In a sideswipe at philosophy from as far back as Plato, which he argues has failed to give adequate account of real negativities, he claims that 'Parmenides also bequeathed another legacy to philosophy: the generation of a purely positive, complementing a purely actual notion of reality, in what I am going to nominate the doctrine of ontological monovalence. In this study I aim to revindicate negativity' (Bhaskar 1993a: 4–5). It is because CR involves a commitment to what I have called a coherent theory of objectivity that the dialecticisation of it will allow for real absence. In other words, CR provides the essential foundations for a defining characteristic of DCR, namely *ontological bi-/polyvalence*. I therefore want to briefly explore the relation between subjectivistic deontologisation in Western philosophy and ontological bi-/polyvalence, because it will help illuminate the further important contribution that DCR makes to the types of discussion that we had in the last chapter.

In *PE* Bhaskar links errors at 1M that are caused by subjectivistic deontologisation (i.e. identity theory) to Platonic *stoicism*. We saw in the last chapter that this was the indifference on Plato's part to the world of matter because it was merely an 'imitation' of immaterial 'forms'. This divests explanation of any explanatory import because we are merely explaining a particular object as an instance of something about which we already know. And so Plato makes epistemology fundamentally *homological*, as opposed to heterological, which is involved, as we know, in the TR dichotomy between transitive and intransitive dimensions. And we know that the failure to distinguish these dimensions hinges upon the denial of alethic truth, transfactuality, stratification and emergence (1M). That is, Plato denies the existence of non-actual essentialities (because all that is real – Platonic forms – is knowable), and so his philosophy does not allow for the category of natural necessity that is so central to the avoidance of 1M errors. Thus, the ontological presupposition of Platonic homology must be one that is depthless and unstratified (because we know that ontological depth realism is the presupposition of heterological transcendental realist epistemology) (Bhaskar 1994: 33). And so we should understand Platonism as offering us *vertical homological* explanation (remember what we said in section 1.3.1 about ontological depth realism involving vertical explanation).

Errors at 2E Bhaskar attributes to Aristotle, or more exactly, to Aristotelian *scepticism*. The importance of Aristotle to the whole question of subjectivistic deontologisation lies in his attempt to give a role to empirical inquiry in the Platonic quest for an understanding of the forms. He argued that the real was not non-material universals but particular concrete individual things from which general conceptions could be extrapolated. The essence of Plato's epistemological theory was accepted however in that Aristotle believed that what was knowable must be eternal and universal; it must have an essence or form totally external to its actualisation in matter. This is despite his immanentising of Platonic transcendent forms. Bhaskar believes that this inability or unwillingness to break from Platonic epistemological criteria is central to the formation of the *primal squeeze on natural necessity* (i.e. the squeeze between the realms of metaphysical and empirical inquiry corresponding to the two poles of antinomy that results from the actualist dissolution of natural necessity; Bhaskar 1993a: 111). Aristotle's interconnection between matter and form in creating the subject matter of philosophy and science therefore involved matter-form composites. This was central to Aristotle's analysis of change in the material world (Bhaskar 1994: 182). On the one hand, knowledge of particular objects depended upon them being forms expressing the universal essence of them. In this regard, Platonic epistemological criteria are met. On the other hand, for Aristotle, material objects were merely the actualisation of their (universal) potentialities and so his actualism was *kinetic*,

as opposed to Plato's *eidetic* alternative (Bhaskar 1994: 182). That is, for Aristotle a particular object was merely the manifestation of non-material being in terms of the process of change whereby the object realises its potentiality, whereas for Plato it was a 'participation' in the form (i.e. an unchanging actualism). In the context of the four stages of Bhaskarian philosophy of science (1M–4D) Aristotelian kinetic actualism involved viewing the subject matter of science (the world of empirical forms) in its processuality of change and development and so corresponds to the 2E level. Thus, his ontological position differed from Plato in the sense that universals were not transcendent but *immanent*. Platonic forms as actualised objects of knowledge were also forms actualised in experience thereby attaining an identity between the domains of the real, actual and empirical (Bhaskar 1994: 5). The non-material forms (real), because they were combined with matter as matter–form composites, became actualised in the objects of knowledge in experience (unlike in Plato). Like Plato, thus, Aristotle defined the subject matter of philosophy in such a way that it could not allow for non-actual essentialities and thus for natural necessity. His new method – immanentising transcendental forms – introduced induction as an essential tool for epistemology because if particular empirical material forms were instances of a non-sensate universal (his immanentising of Platonic ontological forms) then induction became open to humankind as a way of gaining knowledge of those forms in their actualised forms. In other words, induction was the means of gaining knowledge of concrete particulars (empirical) that were the actualisation of transcendent forms (essences).

This difference between Plato and Aristotle is unsustainable because the latter's theory of matter–form composites ultimately functions within Platonic speculative metaphysics. Aristotle argued that all matter must presuppose pure form, an immaterial force that sustains it (i.e. God). In this way, Aristotle did not wish to break from Platonic ontology but merely immanentise it. His inductive method is therefore necessarily supplemented by intellectual intuition, whereby knowledge of being, as distinct from empirical manifestations of being, is reached. Thus, Aristotle offers us two ways of arriving at a homological account of ontological stratification because, on the one hand, his inductive method of gaining knowledge of actualised forms does not allow for natural necessity and, on the other, his immanent forms as actualised essences are ultimately dependent on transcendent universals of the Platonic type. The former contains the basic ingredients of the development of ontology towards Humeanism (as we shall see in a moment) whereas the latter (Aristotle's actual position on ontology as we know) was firmly Platonic.

Now this necessary recourse to Platonic epistemological criteria is a direct consequence of what Bhaskar calls the problem of induction. We know that induction involves the restriction of what we can know

of an event to the extrapolation of causal laws from the observation of repeated instances of it, thereby excluding the possibility of attributing natural necessity to it. But we know that this denial of ontology is erroneous because inductive scepticism must necessarily offer its own contribution to the consideration of antinomial problems, namely the resolution of the thought-matter split by (implicitly) positing constant conjunctions as the characteristic mode of behaviour of matter – the Humean position on the issue of antinomy. Given that this denial is so, it is easy for a sceptic to deny a causal law no matter how many instances of it there are (Bhaskar 1993a: 309). That is, the logic of induction requires that knowledge of universals was to be necessarily restricted to the status of inductively established general empirical laws. Thus, Aristotle fails to make Platonic transcendent forms immanent because his epistemological recourse to induction to do so in fact only succeeds in appealing to Platonic philosophical stoicism because his empiricism in itself implies a philosophical *scepticism* (the scepticism of the problem of induction) about the material world. This is why he supplements induction with intellectual intuition. Thus, Aristotle is right back where he started from – in the domain of Platonic forms, because his inductive method contains an implicit ontological scepticism about the possibility of ontological theory that Aristotle cannot allow. It is important to realise that in failing to immanentise Platonic forms, Aristotle makes no progress away from epistemological and ontological stoicism but instead introduces a whole new front to philosophical inquiry with a problem of its own, namely that of induction. As it is developed into empiricist ontology it contains an accompanying attempted resolution of the antinomial issue. And so we can understand that Aristotle's contribution to philosophy was to introduce epistemological *scepticism* about what we can say about the world. This would be developed by Hume into an implicit contribution to the resolution of Platonic epistemological and ontological antinomy as well, namely the positing of constant conjunctions as the characteristic mode of operation of all matter. Bhaskar argues that with Aristotle we therefore are caught in an epistemological trap between Platonic stoicism and Humean scepticism – two epistemologies that, by virtue of their respective ontologically irrealist errors of dissolving the transfactual and positing a depthless and detotalised world (1M, 2E and 3L errors, as we shall discuss in a moment), cannot allow for non-actual essentialities – and this he calls the *Platonic/Aristotelian fault-line* (Bhaskar 1994: 5). Aristotle's philosophy involves a *primal squeeze* because his immanent epistemology means that he is caught between Plato and what would eventually come to be known as Humeanism (Bhaskar 1994: 183). We have seen how Plato denies natural necessity in his theory of transcendence, and we have seen in section 1.2.3 how Humean induc-



tion also denies natural necessity because of its denial of the imputation of universality to causal laws that extend beyond the domain of experience. As Aristotle commits both of these errors he squeezes out the middle term of natural necessity that is central to the avoidance of the respective epistemological and ontological errors of speculative philosophy, ungrounded in the real world of changing forms, and the inductive scepticism involved in empiricist epistemologies.

This epistemological squeeze leads to what Bhaskar calls the *unhappy consciousness* that has inflicted all subsequent philosophy. This is because the logic of the problem of induction has been carried through by, for example, Hume to the dissolution of ontology altogether and hence the break from the transcendent metaphysics of Plato (although we have seen how empirical realist epistemology involves an unacknowledged ontology and so ultimately cannot sustain this dissolution). Thus, the empirical realist dissolution of the world of transcendent forms is posited. Now, this is not replaced with principles of transfactuality but with an immanent metaphysics of experience (implicit in Hume, explicit in Kant and Hegel). We have seen that to deny transfactuality is to reduce causal laws to their manifestation in events and that this had serious consequences for the category of human intentional praxis. Thus, the immanent metaphysics of experience leads to either the hermeneutical anti-naturalist mind-body split in which the metaphysics of experience is duplicated beyond that of matter (Kant and Hegel) or the empiricist naturalist reification of the world (Hume). Either way, human intentional agency cannot be seen as having a causal impact on the material world. In this way we can see how the epistemological primal squeeze of transfactual natural necessity leads to the impossibility of real intentional human agency and hence the unhappy consciousness. Now this should strike a chord with the reader with a grasp of the themes that resonate in this work because throughout we have been interested in the refutation of precisely the positivistic and hermeneutical alternatives. In this way, we can see how important to Bhaskar is the definition of the history of philosophy, from Plato to post-modernism, in terms of the Platonic/Aristotelian fault-line because it is precisely the primal squeeze generating these problems that has characterised philosophy up until its resolution, according to Bhaskar, in DCR (and, as I shall argue, Marxian materialism).

Let us look at these problems in more detail. We said above that the origins of actualist ontology lie with Platonic forms as actualised objects of knowledge – the Platonic approach to antinomy with its accompanying epistemological and ontological stoicism. In this way, we can understand why Bhaskar defines 1M actualism as the Platonic moment. In the context of our present discussion we should understand 2E ontological monovalence as the grounding of Platonic epistemology of



actualised universals (Plato's criteria for knowledge thus) in an implicit ontology of experience characterised, in the philosophy of Hume, as the supplementation of Aristotelian inductive scepticism with (an unacknowledged but crucial) empiricist ontology. Furthermore, in terms of resolutions of 2E problems by positing spatiotemporalities we saw that without the category of natural necessity there cannot be such intrarelations because the conceptualisation of intrarelations can only be in terms of ontological stratification, emergence and transfactuality. That is, we cannot say that different levels are causally efficacious if we are restricted in our thinking to actualist ontology of events. And so we can see clearly how the epistemological primal squeeze that is involved in actualist ontology must therefore necessitate the split of bi-/polyvalent rhythmical processes from each other. We saw that ontological bi-/polyvalence (allowing for real absencing causal powers for intentional as well as material forces) created the 3L resolution of this 3L irrealist split (e.g. of an individual's identity) from others (an individual's economic status) and that Bhaskar calls this *ontological extentionalism*. In this way, the unhappy consciousness should be seen as the dissolution of the complex forces that determine events in the social world; it is the empirical realist dissolution of what we have just seen are geohistorically mediated spatiotemporal causal entities and structures (processes-in-products-in-processes) that result from 2E ontological bi-/polyvalence. In this way we can see that at 3L a process of mediation of complex totalities is necessary rather than the dissolution of these totalities and their detotalising split that results from the unhappy consciousness. We also saw the 4D implications of this split. The 3L split of the unhappy consciousness leads to either the Humean identification of human agency with physical movement and utterances (what Bhaskar calls *introjective identification*) or the anti-naturalist (i.e. Kantian) dualistic disembodiment (or what Bhaskar calls *projective duplication*) of intentional agency from this level of the physical, in accordance with the ontologically monovalent (2E) corollary of 1M actualist ontology. We know that Bhaskar attempted to resolve these problems by positing intentional 4D transformative praxis in accordance with the 1M and 2E ontological assertions that human intentionality was causally efficacious. We will say more about 4D in a moment.

### 2.3.2 *Hegel, Marx and Engels*

Since one of our interests in Chapter 5 will be in how Bhaskar's dialectic is informed by Marxist dialectics it is perhaps useful in the general introduction to discuss Bhaskar's thoughts on Hegelian and Marxist dialectics. Bhaskar identified two main aspects to the Hegelian dialectic

that correspond to two traditions in ancient Greek philosophy – the Eleatic and Ionian strands. The Eleatic strand was the Socratic endeavour to reach truth through reason achieved through perfecting the art of conversation, discussion and reasoning. The Ionian strand involved the existence of a higher reality, for example God or infinite reason, and was composed of two phases (ascending and descending). Dialectic was seen as the process of the manifestation of this higher reality in the material world. Hegel combined these strands. He posited an absolute spirit, which was the final stage in the development of reason (Eleatic), and history as a teleological process of alienation from reason (Ionian). The realisation of absolute spirit (or absolute reason) occurs when reason realises that the alienation is nothing other than the manifestation of itself. Thus, there is the restoration of reason in its original unity through the recognition of alienation as self-imposed. In combining these strands, Hegel sought to fuse the material world with infinite spirit. Now, the teleological process represented by the two-phased Ionian strand will be of particular interest to us here and in Chapter 4 because it is the terrain where Hegel's dialectics of matter and thought are played out. The ascending phase represents the existence of an infinite spirit which creates matter by an act of externality (i.e. it starts to think that there are things outside itself, thereby creating pure matter as the antithesis of pure thought in spirit). But why should such an infinite spirit want to commit such an act of self-alienation? The answer lies in the descending phase. This occurs when the transcendent world is manifested in the finite or changing material world. Now, the reason why Hegel thought this happened, as we shall see in subsection 4.4.6, is because infinite spirit depends on the finite for its self-realisation (Bhaskar 1994: 116). Specifically, he contended that the finite sphere of geohistorical development of matter existed as a rational totality so that infinite spirit can come to philosophical *self-consciousness*. In other words, spirit needs to externalise matter from itself in order for it to realise that its essence is the unity of thought and matter in thought.

There is a dialectical pattern established by this combination of both phases in the Ionian strand and, in turn, its combination with the Eleatic strand. It is a pattern of original unity, loss or alienation and return to a more complete unity until absolute spirit is realised. Thus, Bhaskar points out that Hegel's dialectic 'transfigures the actual which seems so unjust onto the rational' (Bhaskar 1994: 117). For Hegel, the finite world is composed of events, and so Bhaskar argues that in the Hegelian dialectic the world of actuality is invested with a rationality that reconciles us to it. We are reconciled to the material world of flux and contradictions because we see strife as a process of reconciliation – there is a logic of unity and re-identity in conflict.

According to Bhaskar therefore, Hegel's dialectic is a *realised idealism* in which the world of actuality and human experience is combined with the a priori realm of spirit in a speculative philosophy espousing an 'immanent metaphysics of experience' (Bhaskar 1994: 116). There is an implicit harmony-in-conflict because the actual world of change and conflict is seen as moments in the development of the absolute spirit to self-realisation in a transfiguration that would overcome contradictions in the material world. Hegel can be said to have constructed an immanent teleology in this respect.

Bhaskar accuses Hegel of making the transcendent world immanent, which thereby has the effect of collapsing the intransitive, structured, transfactual and ontologically multiform reality into the realm of the actual (Bhaskar 1994: 121–2). Bhaskar is quite unclear at times about this in both *DPF* and *PE* so some further clarification is needed. If the actual is seen as a moment of the infinite, then Hegel is arguing that it is possible for human beings' knowledge of the world to exactly reflect how things are independently of us. In subsection 4.3.1 we will see that Hegel thinks that this is because there is an original protoconceptual unity to basic sense experience, which, as we shall see in subsection 4.4.1, is the apprehension of elemental nature independently of the human mind. We have already seen that this contention denies the necessary distinction between the intransitive and transitive dimensions because the infinite complexities of the sphere of the real are not acknowledged. Hegel, therefore, is ultimately falling back on a fatal subject–object identity as we shall see in subsections 4.4.2 and 4.4.3.

It logically follows that if the material world is seen as the process of the Idea coming to know itself, then Hegel must be saying that the empirical world is nothing other than a creation of the Idea. Bhaskar illustrates this by means of a diagram in *PE* in which Hegelian categories and conceptions are arrived at via a threefold process (Bhaskar 1994: 127).

The first moment involves the positivistic uncritical acceptance of empirically received data from the current state of affairs. We will see in subsection 4.3.3 that this is act of incorporating contingent scientific results into the pre-existing philosophical system when they correspond with forms identified a priori. And we shall see in subsection 4.3.2 how this is evidence of what I will call a strong apriorism at work. This is the foundation upon which the infinite realm is built via the projection of empirically acquired knowledge, characteristic of the Eleatic strand, on to it. This projection was classified by Marx as a transformative method similar to the method of humanist philosopher Ludwig Andreas Feuerbach (1804–1872) and it constitutes the second phase.<sup>8</sup> The third phase is the transfiguration of reality characteristic of the Ionian strand when actuality is transfigured on to the infinite

realm. We will see in Chapter 5 the importance of this critique by Marx and Engels because they used essentially realist principles to criticise Hegel's philosophy. For example, we will see that there are cognitivist presuppositions to the Ionian strand in that empirically perceived problems are to be resolved by the mind and Marx and Engels allegedly used principles of emergence to reject them. In particular, we will see in section 5.2 that Engels's materialist inversion of Hegelian cognitivism took the form of EPM in which the psychological or cognitive, having diachronic dependence on material properties (biological, etc.), precludes such cognitivism.

The key to Marx's analysis of capitalism is in his brilliant exposition of theory–practice inconsistencies in capitalist socioeconomic relations. The exposing of these inconsistencies by social scientists (such as Marx) constituted an ideological critique of the philosophies that seek to reify capitalist relations of production leading to the articulation of an axiology of freedom by the working class (the abolition of power relations, as we have seen). Ideological critique and the axiology of freedom are important themes in the Bhaskarian interpretation of Marxian social science. The ideological critique of social scientists consists of identifying real absences of human well-being through identifying constraints on 'true' human freedoms. The axiology of freedom is the transformative negation of 'holistically mediated' (Bhaskar 1994: 135) constraints by causally efficacious intentional human praxis.

We will also see in subsection 5.3.2 that Marx's analysis in his later 'economic' works included the presupposition of ontological conceptions of 1M non-identity, 2E negativity and contradiction and 3L internally related totalities. In this account, *Capital*, vol. I (CI) and other such texts can be seen as an adverse reaction to 'irrealist' philosophies. It is not contentious that Marx believed himself to be abstracting socioeconomic entities and structures from a particular stage of their development and change. In Bhaskar's realist interpretation, Marx was using *analytical reasoning* here, which corresponded to employing an *epistemological dialectic*. Essentially, this involves conceptualising an entity/object/structure at a given point in the process of its change. Specifically it involves realist categories of intransitivity, transfactuality and non-identity. This is because Bhaskar argues that it must be understood as abstracting an object from open systems and placing it in conditions of closure and so it is a crucial part of the transitive dimension. The irrealism occurs in philosophical systems such as empirical realism and transcendental idealism when the epistemic fallacy is committed – the fetishisation of closed systems resulting in anthroporealism and the denial of ontic and epistemic change. Bhaskar stresses that analytical reasoning is valid in so far as constructing the transitive dimension is concerned. In order to avoid the error of the epistemic fallacy, how-

ever, it is vital to endow it with a dialectical logic that is grounded in the domain of the real (intransitivity):

Dialectic over-reaches and contains analytical reason as a precious gem vital for grounding truth claims and attributions of natural necessity and deducing consequences for experimental tests. But logic is only one (vital) moment in the process of scientific thought.

(Bhaskar 1994: 137)

It is only Marxian dialectics that can overcome this 'problematic' because it is only in Marx and Engels that we get workable realist dialectics. Dialectical systems of the Hegelian fold cannot resolve the 'problem' because of their dependence on an empirical realist ontology and immanent teleology. In this respect, Bhaskar claims that 'irrealist dialectics' are irreducibly endist (Bhaskar 1994: 140). These are all themes that we will explore in greater detail in Chapters 4 and 5.

## 2.4 Conclusion

Our introduction to key DCR terms is now complete. This chapter has been intended as an introduction to Bhaskarian dialectics in general and how its concepts are useful in my endeavour to chart the relationship between Kant, Hegel, Marx and Engels. This does not mean that I think that Bhaskar is above reproach. I contend in Chapter 5, for example, that certain aspects of his DCR are unworkable and need to be abandoned. Nevertheless, most of what he says is important and, with his system introduced, we must now turn to the substantive thesis of this work. In the next chapter we will trace the development of Kantian philosophy of science. I will argue that it provides the methodological basis of coherent realism of the Bhaskarian fold even though the substantive idealist application of the system by Kant leads to epistemic and ontic errors. These methodological foundations provide the basis for the progression of our discussion to Hegel, Marx and Engels in the subsequent two chapters, and so it is to Kant that we will now turn.

## 3 Kant

### 3.1 Introduction

We saw in subsection 1.2.2 that Kant is hugely significant to Western philosophy in that he wished to solve the problems of antinomy thrown up by the rationalist and empiricist traditions by steering a middle course between them. We saw that he constructed an empirical metaphysics that sought to revive questions of ontology but from within the parameters of the experiencing subject. In this chapter I want to explore this endeavour in considerably more detail and, in particular, examine more closely its significance to the CR project in general and DCR in particular. But before we look at a possible DCR analysis of Kant we need to look in some detail at what exactly we will be analysing. In particular we need to look at what I am going to call Kant's 'object-for-us', formulated as a result of his Copernican Revolution, because it is here that the Bhaskarian critique will be focused.

### 3.2 Kant's Copernican Revolution

#### 3.2.1 *The attack on philosophical realism*

In the preface to the *CPR*, Kant sets out clearly what he means by a 'critique of pure reason'. He tells us that he wants to subject a priori human reason (understood as referring to conceptual components that are brought to cognition but not derived from experience) to rigorous scrutiny:

reason should take on anew the most difficult of all its tasks, namely, that of self-knowledge, and to institute a court of justice, by which reason may secure its rightful claims while dismissing all its groundless pretensions, and this not by mere decrees but according to its own eternal and unchangeable laws; and this court is none other than the critique of pure reason itself.

Yet by this I . . . understand . . . a critique of the faculty of reason in general, in respect of all the cognitions after which reason might strive independently of all experience, and hence the decision about the possibility of impossibility of a metaphysics in general and the determination of its sources, as well as its extent and boundaries.

(Kant 1998: Axii; 101)

We need to examine precisely what grounds there are (if any) for employing concepts and categories unconnected with experience that allow us to know things about aspects of reality, be it the rationalist metaphysical claim to know God or the empiricist contention about the character of the elemental properties of material objects. As I said in subsection 1.2.2, this endeavour was motivated by Kant's desire to resolve the inner conflict in his thought evidenced by the rather contradictory conclusions of his previous works. We saw that he was dissatisfied with the Leibnizian contention that the human intellect was simply struck by nature's intrinsic rational order, on the one hand, and Hume's elimination of metaphysics by his positing of fairly simple phenomena of the consciousness used to impose order and understanding on to raw sense data, on the other. We need to say more about this dissatisfaction because it is central to the epistemological problems that Kant draws our attention to in the 'Aesthetic'.

In a nutshell, Kant was very uneasy with the commonsense assumption that human reason can represent the world more or less as it is in itself because the mind-independent object can appear to us. Both rationalism and empiricism seemed to presuppose that our senses could perceive objects in the world pretty much as they are in themselves. As we saw in subsection 1.2.1, both approaches therefore embraced ontological realism. In rationalism it was the notion that objects are possible for us because we have access to a rational order *intrinsic* to nature upon which our experiences depend. But while empiricism, on the other hand, rejected the idea that we can come to know any such order and that we must instead impose an order on to raw sense data, its commitment to the idea that the mind takes direct cognition of independently existing elements upon which order is imposed was a kind of realism itself. Empiricism might have got rid of the speculative nonsense that we could become acquainted with the, as it were, rational totality of the universe, but it still simply assumed that we could take cognition of something as it was in itself. Kant wanted to divest philosophy of the age-old commonsense notion that reality could become an object for us that had survived even Hume's devastating attacks on rationalism. It was this endeavour that resulted in the 'Aesthetic'.

Kant's revolution in philosophy is called his Copernican Revolution. I have argued in subsection 1.2.2 and elsewhere (Agar 2004: 167) that this involved the reversal of the Cartesian assumption that our

representation of the object conforms to the object-in-itself. The first thing to say is that Kant does not have a problem with the realism that is involved in common sense insofar as he is not trying to say that the objects we perceive do not actually exist. What he does have a problem with is realism in a *philosophical* sense. For philosophical knowledge, it is not good enough to simply state that there is a connection between the object and the way we perceive it, we need to *represent* this relation, and in order to do this we need to be able to stand outside our capacity for representation, something that Kant insists is impossible (Gardner 2002: 37). He refers to this impossible representation as 'the concept of an object in general', meaning that it is the concept of an object's ontological status independent of any epistemic relation it may have to human (or any other) subjects (Gardner 2002: 38). But Kant thinks that it is precisely this distinction that makes the object's ontology unknowable because, if the conditions of its being are external to the conditions of its capacity to be known, then its ontic status cannot be known to us. Kant is sure that its capacity to be known refers simply to the cognitive capacity of the human mind and so to assert (as the various philosophical realisms, such as intellectual rationalism and empiricism, do) that we can know an object because of the ways in which we represent it via cognition does not contribute anything to questions about the mind-independent status of objects.<sup>1</sup> For the purposes of coherent and sustainable epistemology and ontology he wanted to transform *objects-in-themselves* into *objects-for-us*.

The analogy with Copernican astronomy is this. Astronomers before Copernicus thought that the complex movement of other planets in the sky was due to the planets themselves. But Copernicus believed that he could account for this complexity by arguing that it was because the earth itself was moving. The planets themselves were not moving in strange complicated ways but instead were occupying fairly simple orbits around the sun. Their apparent complex movements were down to nothing more than the way we perceive them. What was previously taken to be an independent reality is redescribed as a mere appearance (i.e. it is dependent on the way that we take cognition of it). When, for example, we see Mars behaving in this way we take the commonsense position of assuming that Mars itself is responsible for it. But in Kant's Copernican Revolution this object is reclassified as a mere appearance because its observed behaviour is unique to our perspective of it. Thus, the object-in-itself of pre-Copernican astronomy becomes the object-*for-us* in Copernican astronomy. Note that this does not involve the dissolution of the object because we are still talking about things independently of us but in the restricted sense of *how they appear* to us. As we will see in a moment, we impose a structure and order on to objects-in-themselves that make them possible objects of our experience. Kant therefore acknowledges that it is objects-in-themselves that



determine what we do or do not experience and therefore the content of our knowledge but denies that we could come to know them (Collier 1994: 86). And so Kant does not doubt that there is something real out there that we are taking cognition of and so we conform to *commonsense* realism. He is simply saying that we can only know it as an appearance to us, as an object-for-us rather than as an object-in-itself. Thus, Kant wants us to think of the object as an appearance rather than as a thing-in-itself (Kant 1998: Bxx, 112). And so he rejects *philosophical* realism. Now, he thought that the philosophical analogy to pre-Copernican astronomy was pre-critical metaphysics, according to which we passively receive objects-in-themselves as they actually are (Broad 1978: 13). Kant therefore executes a Copernican Revolution in metaphysics by explaining the character of the object in terms of our mode of cognition (Gardner 2002: 42) in the sense that the object must *conform* to our mode of cognition (Stern 1996: 15). As Kant contends in the 'Preface to the second edition' of the *CPR*:

Up to now it has been assumed that all our cognition must conform to the objects: but all attempts to find out something about them *a priori* through concepts that would extend our cognition have, on this pre-supposition, come to nothing. Hence let us once try whether we do not get farther with the problems of metaphysics by assuming that the objects must conform to our cognition . . . This would just be like the first thoughts of Copernicus, who, when he did not make good progress in the explanation of the celestial motions if he assumed that the entire celestial host revolves around the observer, tried to see if he might have greater success if he made the observer revolve and left the stars at rest. Now in metaphysics we can try in a similar way regarding the intuition of objects. If intuition has to conform to the constitution of the objects, then I do not see how we can know anything of them *a priori*; but if the object (as an object of the senses) conforms to the constitution of our faculty of intuition, then I can very well represent this possibility to myself.

(Kant 1998: Bxvi, 110)

It is important to stress again that in constructing the metaphysical object-for-us he could defend himself from accusations that he was advocating a kind of Berkeleian idealism according to which the object-in-itself was simply dissolved into epistemology. The distinction between epistemology and ontology is maintained, or so Kant would argue. We will see in section 3.4 and thereafter that this effort by Kant was ultimately fruitless because of his implicit empirical realism. But let us not worry about that here. For now it is enough to grasp

the basics of Kant's Copernican Revolution in metaphysics that will, despite his failings from CR perspective, provide CR with important methodological principles in the area of epistemology.<sup>2</sup>

### 3.2.2 *The immanent a priori principles of cognition* – *philosophical transcendentalism*

When Kant talks about the object conforming to our mode of cognition he is referring to something a priori because he is trying to establish the conditions of possibility of experience, i.e. before we actually experience anything. And so he does not have a problem with the principle of a priori reasoning, as such, just with the way it was used in pre-critical metaphysics as a means of accessing the object-in-itself. Instead, he wants to use it to access the object-for-us. Accordingly, what is a priori lies fairly and squarely in that part of our mode of cognition that creates objects-for-us. He reproaches rationalism because it applies a priori principles to objects beyond the possible range of sense experience. Rather than a *transcendent* application Kant wants to make these principles *immanent* (Broad 1978: 2). What makes the object possible for us is not some aprioristic intrinsic feature of it as a thing-in-itself that simply impinges on the consciousness but an aprioristic element in the consciousness. With this new application Kant hopes to preserve the commonsense realist idea that the reason why my mind represents, for example, the moon in the way it does is because of how the moon actually appears to me in the night sky. My experience of the moon as I represent it in my mind is the result of the fact that the moon has a structure that makes it intelligible. But that a priori structure does not lie in the moon-in-itself but in the moon-for-me, in the set of a priori cognitive structures in my mind that makes it a possible object for my experiences. The commonsense idea that knowledge must be a posteriori (i.e. it is derived through experience from objects that have a structure that makes them intelligible to us) is preserved because Kant is distinguishing the philosophical transcendental (i.e. the a priori features of objects) from the pre-philosophical empirically real (i.e. the way the objects directly impinge on our senses at the moment of experience). Indeed, Kant uses this distinction to accuse Leibniz of dissolving the object. We saw in subsection 1.2.1 that Leibniz took scientifically acquired knowledge of nature as a rational totality as evidence of the dependence of science on intellectual intuition. According to Kant, this amounted to simply projecting the empirically ascertainable features of objects on to the metaphysical level. This makes rationalist ontology unsustainable because it is basing the constitution of the object entirely on the way that it is directly experienced. Rationalists do not have any means of conceptualising how the object is formed.

The irony is that in trying to posit the object-in-itself as knowable they dissolve not only it but also any discernable way in which we can conceptualise objects at all.

Kant thinks that not only is the upshot of this distinction between the philosophical *a priori* and the pre-philosophical empirical that the Copernican Revolution can be completed without destroying the object but it is, so the theory goes, the only way the object can be conceptualised. It is vital to think of Kantian transcendental idealism in these terms because it goes to the heart not only of Kant's rejection of the rationalist idea that we have access to unified totalities-in-themselves but also Humean scepticism. We may not be able to know the object-in-itself but this does not mean that we cannot know some sense of reality (when by reality we mean the world outside our experience that has a structure that makes it intelligible to us). This is because when we talk of objects-for-us we are talking about a special kind of reality that our minds formulate, or, as Kant puts it:

reason has insight only into what it itself produces according to its own design; . . . it must take the lead with principles for its own judgement according to constant laws and compel nature to answer its questions, rather than letting nature guide its movements by keeping reason, as it were, in leading-strings.

(Kant 1998: Bxiii, 109)

It is in these terms that Kant claims not only to endorse metaphysics but also to formulate a metaphysical theory that alone can actually come up with a philosophically valid conception of the object. And so Kantian philosophy does not just involve the Copernican methodological principle that objects should be considered from the perspective of our mode of cognition (which in itself is metaphysically neutral) but also the idealist metaphysical contention about how these objects are created (Gardner 2002: 44).

I will elucidate on this fairly important distinction. Kant's philosophy (including his Copernican Revolution in epistemology and his idealist metaphysics) is properly described as critical transcendental idealism. It is 'critical' because it seeks to examine *a priori* the mind's capacity to take cognition of objects rather than, as is the case in pre-critical philosophy from Plato to Hume, simply assume that it can passively receive them in some form or another. It is 'transcendental' because it is concerned with establishing the conditions of possibility of our knowledge of objects as distinct from talk about the constitution of the objects themselves. In this way, we should understand transcendentalism as in itself philosophically neutral because it is simply concerned 'not so much with objects but rather with our mode of cognition of

objects insofar as this is to be possible *a priori*' (Kant 1998: B25, 149). A critical examination of a priori human cognition and establishing the conditions of possibility of our knowledge of objects says nothing about their metaphysical status. As such, critical transcendentalism is simply the terrain of the Copernican Revolution in epistemic method.<sup>3</sup> 'Idealism', on the other hand, is concerned with establishing metaphysical conditions. As such, it involves the transformation of the object-in-itself into the object-for-us. Thus, transcendental idealism is about positing, first, the conditions under which knowledge of objects is possible and, second, that these objects are possible because they are for-us rather than in-themselves.

The idealist aspect of transcendental idealism is essential because the whole credibility of Kant's Copernican Revolution hinges on proving that our knowledge corresponds to something external to it. It thus depends upon proving that the object-for-us is an object to which our cognition conforms in accordance with commonsense realism. Kant must prove not just that the object must conform to our mode of cognition but the *existence* of the object-for-us and the irrelevance, from a philosophical point of view, of talk about the object-in-itself. Thus, his metaphysics of experience is designed to demonstrate the coherence of transcendental idealism and the incoherence of transcendental realism.

### 3.2.3 *Transcendental idealism and the metaphysics of experience*

It follows from all of this that if transcendental idealism at its most simple is the insistence that the object-for-us as the condition of possibility of experience must be distinguished from the object-in-itself, then any contention that the condition of possibility of experience owes anything to the nature of the object-in-itself is going to be a transcendental realist inversion of this essential principle. Kant makes clear what his definitions of transcendental idealism and realism are in the *CPR*:

all objects of an experience possible for us, are nothing but appearances, i.e., mere representations, which, as they are represented, as extended beings or series alterations, have outside our thoughts no existence grounded in itself. This doctrine I call transcendental idealism. The realist, in the transcendental signification, makes these modifications of our sensibility into things subsisting in themselves, and hence makes mere representations into things-in-themselves.

(Kant 1998: A490–1/B518–9, 510–1)

The 'objects of an experience possible for us' as 'representations' which 'have outside our thoughts no existence in itself' are therefore objects-for-us. Conversely, transcendental realism transforms objects-for-us into 'things subsisting in themselves' thereby making 'mere representations into things-in-themselves'. I will concentrate on the Kantian analysis of leading proponents of, in his mind, transcendental realism that we have already introduced – Leibniz, Locke and Hume.

Leibniz's transcendental realism is properly described as theocentric (Allison 1983: 20–1). He claimed that knowledge derived from sensation was a confused version of purely intellectual knowledge. He argued that 'the nature of an individual substance or of a complete being is to have a notion so complete that it is sufficient to comprise and to allow the deduction from it of all the predicates of the subject to which this notion is attributed' (Leibniz 1953: §8, 13). This involves what is known as *analytical* judgements. A good example of this can be taken from mathematics. The judgement 'all triangles have three sides' is analytical because the concept of three-sidedness is contained in the concept of triangularity. It would be absurd to say that triangles do not necessarily contain three sides. And, in theology, the judgement or predicate 'God is perfect' is analytical because the concept of perfection is inherent to the concept of 'God' – it is impossible to think of God as being imperfect. The predicate 'God is perfect' is contained in the concept of the subject (God). Kant thought that these propositions were fairly innocuous when applied to mathematics and theology. But Leibniz also thought that they were applicable to the subject matter of the empirical sciences. The problem was that knowledge of complete concepts required an intuitive grasp of infinity (Allison 1983: 20). As it is only God who is capable of such things, human knowledge, by its nature finite, is a confused version of purely intellectual knowledge. Human beings could not arrive at complete knowledge of logical essences and so had to rely on synthetic, as opposed to analytic (terms which I shall define in a moment), propositions. But the important point according to Kant was that the synthetic character of truths in the domain of experience was for Leibniz merely a reflection of the inadequacies of human sense experience and not part of the nature of the propositions themselves (Allison 1983: 20).

Locke's distinction between the imposed structure of the mind upon the object and the real substratum, which I introduced in subsection 1.2.1, can be expressed as the distinction between nominal (human) and real (divine) essence. In this regard he was on similar ground to Leibnizian theocentrism. The main difference between them is that while Leibniz insisted that divine knowledge involved infinite reason, Locke was sure that it was merely a more sophisticated version of perceptual knowledge. Whereas humans have to make do with their limited senses God looks upon creation with 'microscopical eyes' (Locke 1975). As

far as Kant was concerned, this difference between Lockean empiricism and Leibnizian rationalism did not matter a great deal when one considers that they were both transcendental realists. It is not the claim that the object-in-itself is accessible (to a greater or lesser extent) via intellectual or sensible means that is important, rather it is the, in his view, erroneous claim that it is accessible at all that Kant has a problem with. And on the grounds that access to the object-in-itself via intellectual intuition is impossible, Kant would dismiss Platonic Forms as transcendental realist in nature too.

We also saw in subsection 1.2.1 that Hume dissolved the Lockean substratum and instead grounded metaphysics in general cognition. He argued that objects of human experience are nothing more than perceptions or impressions. Given this, it might seem difficult to see how Kant could call Hume a TR. We can account for this by drawing attention to the main thrust of the Kantian critique of Hume in subsection 1.2.2. We saw that Hume had failed to recognise a priori conceptual understanding that was a fundamental prerequisite to intuition. Kant therefore posited an underlying unity to the object (formed by the concepts of particular objects, categories, unities and causation) that was provided by the constituting subject. He was in agreement with the rationalist principle that the impressions that determine the structure of empirical objects are not simply given to the mind, as they are with Hume, but are subject to a priori rules of synthesis. This error by Hume, Kant contends, exposes him as a transcendental realist and is the Humean method of confusing appearances with things-in-themselves.

The picture that emerges is that, although empiricism and rationalism employ radically different approaches to antinomy, Kant identifies this common error in both of them. His basic argument is therefore that unless we are prepared to countenance necessary a priori structures of objects that are knowable independently of appearances, contra empiricism, and these structures are not derivable from the use of logic (analytics), contra rationalism, then we will commit the, as he sees it, indefensible error of transcendental realism. In other words, Kant argues against Hume that a priori metaphysical inquiry is possible and against Leibniz that it does not have to take the form of analytic a priori. Rather, Kant presents us with synthetic a priori metaphysics. A credible defence of the existence of the object-for-us would depend on this endeavour.

### 3.2.4 *Synthetic a priori knowledge*

The first thing to say is that this concept involves important concessions to empiricism and rationalism as well as constituting a threat to them. In the 'Introduction' to the *CPR* Kant begins his discussion of



the synthetic a priori by acknowledging the empiricist point that 'experience is without doubt the first product that our understanding brings forth as it works on the raw material of sensible sensations' (Kant 1998: A1/B1, 127). But Kant argues that this is simply to say that all knowledge must *begin* with experience. It does not mean, as it does with empiricism, that it is *derived directly from* experience. He stresses this by adding that experience is:

far from the only field to which our understanding can be restricted. It tells us, to be sure, what is, but never that it must necessarily be thus and not otherwise. For that very reason it gives us no true universality, and reason, which is so desirous of this kind of cognitions, is more stimulated than satisfied by it. Now such universal cognitions, which have at the same time the character of inner necessity, must be clear and certain for themselves, independently of experience; hence one calls them *a priori* cognitions: whereas that which is merely borrowed from experience is, as it is put, cognised only *a posteriori*, or empirically.

(Kant 1998: A1/B1–A2, 127)

Kant is distinguishing between what we might call contingent or factual knowledge that is derived from experience (*a posteriori*) and necessary or universal knowledge that is not (*a priori*). The latter are 'a priori cognitions' that exist 'independently of experience' and therefore establish the existence of an object that is the condition of possibility of experience.

Kant is therefore saying that it is perfectly proper to use metaphysics as a way of extending our knowledge and, in agreement with Leibniz, argues that necessity and universality are the criteria for the *a priori* (Allison 1983: 78). But the fact that he thinks that some important metaphysical concepts are synthetic and not analytic means that he is in disagreement with Leibniz about exactly what form the *a priori* takes. This is going to bring him into conflict with Hume and Leibniz because they had always assumed that the distinction between analytic and synthetic knowledge was another way of saying that there was a distinction between *a priori* and *a posteriori* knowledge. In other words, both these pre-critical philosophers thought that what was *a priori* and necessary cannot be synthetic.

We saw above that Kant had no problem with certain types of analytic judgement, such as 'God is perfect' or the mathematical judgement 'all triangles have three sides'. Thus, they are necessary judgements because we have no alternative but to make them. As we have said, it would be contradictory to say that it is not necessarily the case that all triangles have three sides because we would be saying that something that is three-sided does not necessarily have three sides. And we have seen

that the integrity of analytic judgements hinges on the fact that the predicate (triangles having three sides) is contained in the concept of the subject (triangles). As we saw above these are identity statements – at no point is experience necessary because ‘I do not need to go beyond my concept at all in order to formulate the judgement, and therefore need no testimony from experience for that’ (Kant 1998: B11, 142). Our knowledge is not extended therefore because what we are saying is something like ‘that which satisfies concept A (where  $A = B + C$ ) satisfies concept C’ (Gardner 2002: 54). All we are doing is explicating concepts that have already been joined. The judgement ‘God is perfect’ is the explication of these concepts of God and perfection by showing them to be necessarily connected and any alternative judgement to be contradictory. Rationalists and empiricists rightly conclude from this that if judgements can be shown to be analytic then we have the grounds for establishing them as necessary and a priori. The difference between them is that rationalists think that judgements can be analytic whereas empiricists insist that they cannot.

Empirical knowledge is different because it is not concerned with explicating already joined concepts but with bringing together previously unconnected concepts. Its coherence as a form of knowledge cannot rely on the principle of contradiction to connect predicate and subject. Kant uses an example of a synthetic judgement concerning bodies and weights. He starts off by saying that the concept of an extended body is analytical: ‘[t]hat a body is extended is a proposition that is established a priori and is not a judgement of experience’ (Kant 1998: B12, 142). It would be absurd to conceive of a body that is not extended and so all I need to make the judgement true is the principle of contradiction. But the additional judgement ‘all bodies have weight’ is something slightly different because it represents an extension of cognitive knowledge about the concept of body that is not contained in that concept itself. In other words, it is illegitimate to say that some bodies are not extended because the concept of extension is intrinsic to the concept of body, but it is not at all illegitimate to imagine a weightless body. The concept of weight is therefore something that is added to the concept of body, thereby extending our knowledge of it. If it is not intrinsic to the concept of body then the connection to it must be provided in some other way, i.e. by experience. Hence the judgement ‘all bodies have weight’ is synthetic because it connects two distinct concepts together through experience. Kant explains it as follows:

although I do not at all include the predicate of weight in the concept of a body in general, the concept nevertheless designates an object of experience through a part of it, to which I can add still other parts of the same experience as belonging with the former. I can first cognise the concept of body analytically through the



marks of extension, of impenetrability, of shape, etc., which are all thought in this concept. But now I amplify my cognition and, looking back to the experience from which I had extracted this concept of body, I find that weight is also always connected with the previous marks and I therefore add this synthetically as predicate to that concept.

(Kant 1998: A8, 142)

In other words, the concept 'body' contains the analytic predicate 'extension' because it is 'thought in this concept'. But it also contains the synthetic predicate 'weight' because *through my experiences* I find that this is another predicate to the concept 'body'. Even though the stimulus for me forming a conception of an extended body is 'looking back to the experience from which I had extracted this concept', the concept is sustained purely by logical principles. The role of experience here is restricted to the rather mundane truism that without the sensible intuition of extended bodies I have no reason to formulate analytical propositions about them. (In a moment we will see that this is because intuitions and concepts are distinct but mutually dependent.) But the role of experience in the concept of a weighted extended body is crucial because it helps to extend our knowledge in that it brings us into contact with something that is not deducible through logic.

If it is not the principle of contradiction that connects predicates to concepts in synthetic judgements then what does? In other words, we need to uncover what it is that connects concepts to objects in the domain of experience. As Kant points out:

What is the *X* here on which the understanding depends when it believes itself to discover beyond the concept of *A* a predicate that is foreign to it and that is yet connected with it? It cannot be experience, for the principle that has been adduced adds the latter representations to the former not only with greater generality than experience can provide, but also with the expression of necessity, hence entirely *a priori* and from mere concepts.

(Kant 1998: A9/B13, 131–2)

Kant is here accepting Hume's point that the 'X' cannot be provided by experience because the judgement, for example, that every body has weight 'adds the latter representations to the former not only with greater generality than experience can provide, but also with the expression of necessity'. This point about Hume is significant because it helps to explain his general scepticism about metaphysics. He, along with Kant, rejected analytical *a priori* knowledge on the grounds that if analytic judgements are *a priori*, and therefore are unable to *extend* our knowledge, then they become useless to epistemology. But he also

rejects synthetic a priori knowledge as well because he is sure that any notion of necessity cannot be provided by experience. Trying to identify necessity at the level of experience is, for Hume, nothing more than the sum of irrational expectations caused by constant conjunctions of events (Bhaskar 1978: 149; Broad 1978: 8). But Kant thinks that we do not have to stop talking about 'X' as Hume concludes from this that we must. Rather, Kant is sure that the principle must be provided by something else that is synthetic but has a priori necessity and universality. In other words, something that is a priori can also be synthetic and hence add something to our knowledge that was not there before.

In summary, then, we can see that Kant rejects the Leibnizian and Humean assumption that there is a simple alternative between analytic a priori and synthetic a posteriori judgement. It is perfectly possible for us to have judgements that are synthetic a priori. This is absolutely essential to transcendental idealism because, as we will see, the necessary 'X' lies in human cognition and is what constitutes the structure of experience that provides the object-for-us. Against Hume it affirms the rationalist idea that experience must have a structure and that the condition of possibility for experience cannot lie in impressions/raw sense data. Against Leibniz it is the insistence that this structure cannot derive from analytics (logic) but instead lies in the cognitive structures that the mind has as it experiences things. These differences between Leibniz, Hume and Kant are expressed in a considerably simplified form in Table 3.1.

But if Kant insists that synthetic apriorism is possible, it creates a significant problem because, as we know, the a priori something 'X' exists *outside* the concepts in our judgement that connects them together. In other words, how do we connect our concepts to the objects we encounter in experience? This was not a problem for Hume because the 'something' outside the concepts in our judgement is the impressions that constitute raw sense data or, to put it another way, the object as it is given to us in experience. Hence he thought he had solved the problem of antinomy by positing empirical synthesis as the predicate of all knowledge. As all our conceptions become a posteriori, metaphysical apriorism is literally useless. Hume was sure that the problem of how thought is related to objects is solved by assuming that they are given in experience. And we know that Leibniz's contention that the relation of the concepts in our judgements to the object is contained in the formal

Table 3.1 How does thought relate to objects?

	<i>Analytic a priori</i>	<i>Synthetic a posteriori</i>	<i>Synthetic a priori</i>
Leibniz	Yes	No	No
Hume	No	Yes	No
Kant	No	No	Yes

structure of logic meant that he too felt that he had solved antinomial problems. Logical metaphysics accounted for the relation. But, as we saw in subsection 3.2.2, Kant was sure that this made rationalist ontology unsustainable because it amounted to the projection of empirically ascertainable features of objects on to the metaphysical level. Leibniz's transcendent analytic a priori rational totality was dependent on the empirical synthesis that it was designed to transcend. Indeed, that Kant is so scathing about such TR solutions as offered by Hume and Leibniz to this massive epistemological problem meant that he could rely on neither empiricist nor rationalist assumptions regarding the connection of our concepts to objects.

Kant may have presented us with grounds for thinking that synthetic a priori judgements are possible but his job is not quite finished in this regard because we still need to prove what the source of synthetically constructed knowledge is (Gardner 2002: 56). We are left with the crucial question of how to 'cognise the concept of cause as belonging to it [concept of event] even though not contained in it' (Kant 1998: A9/B13, 131). This conviction by Kant provides the backdrop to the 'Aesthetic' – the rejection of the rationalist idea that concepts are connected to objects with logic and the rejection of the empiricist idea that they are connected simply by being given to us in sense experience. This section of the *CPR* is essential because in it Kant formulates in detail his theory of synthetic apriorism, according to which concepts and sense experience are distinct but mutually dependent facets of the mind.

### 3.3 The conditions of possibility of experience: the 'Aesthetic', 'Analytic' and 'Dialectic'

#### 3.3.1 *The 'Aesthetic' I: pure intuition*

In the 'Aesthetic' Kant is concerned with establishing exactly what the sensible conditions of experience are. When I have the experience of witnessing boiling water turn to steam it consists of two main parts – intuition (sensibility) and conception (understanding by the intellect), which are distinct but mutually dependent:

The capacity (receptivity) to acquire representations through the way in which we are affected by objects is called sensibility. Objects are therefore given to us by means of sensibility, and it alone affords us intuitions; but they are thought through the understanding, and from it arise concepts. But all thought, whether straightaway ... or through a detour ... must ultimately be related to intuitions, thus, in our case, to sensibility, since there is no other way in which objects can be given to us.

(Kant 1998: A19/B33, 155)

And again:

Without sensibility no object would be given to us, and without understanding none would be thought. Thoughts without content are empty, intuitions without concepts are blind. It is just as necessary to make the mind's concepts sensible (i.e., to add an object to them in intuition) as it is to make its intuitions understandable (i.e., to bring them under concepts). Further, these two faculties or capacities cannot exchange their functions. The understanding is not capable of intuiting anything, and the senses are not capable of thinking anything. Only from their unification can cognition arise. But on this account one must not mix up their roles, rather one has great cause to separate them carefully from each other and distinguish them. Hence we distinguish the science of the rules of sensibility in general, i.e., aesthetic, from the science of the rules of understanding in general, i.e., logic.

(Kant 1998: B75/A51, 193–194)

Thus, my knowledge about a particular object depends on me attaching this sensible intuition to a concept. Without both I can never come to any judgement about what I am experiencing because 'only through their unification can cognition arise'. Now it should not surprise us, based on what we have been saying about them, that Kant thinks that Hume and Leibniz assimilate these features into one another. The fact that they both assimilate them means that both posit intellectual intuition as an intrinsic feature of the mind – that the intuition of an object in sense experience and the conceptualisation of it are indistinguishable. Whereas Leibniz reduces the former to the status of a confused and unclear version of the latter, Hume's insistence that thought is nothing more than impressions given in experience reduces the latter to the former.

The job Kant sets himself in the 'Aesthetic' is to establish the impossibility of intellectual intuition. If we were to have it, then both sense experience and concept formation would be superfluous (Gardner 2002: 69). Sense experience would be unnecessary because in order for me to be presented with an object all I need to do is to form a conception of it. There would be no need for concept formation because to simply experience an object would be to know it. The distinction between knowing an object and creating it conceptually would vanish. Such an achievement, Kant supposes, is only possible by God (Kant 1998: B72, 191). Human intuition is, by contrast, sensible. We will see now that this allows for the distinction between mere sense experience of the object and the thinking of it – we can only make sense of the object that we pick up in sense experience if we can form a conception of it in our minds.

In accordance with the logic of synthetic a priori judgements,

concept formation is going to contain something not given in sensible intuition at all precisely because it is a priori – that something ‘X’. And so in order for Kant to distinguish his conviction that human intuition is sensible from Humean scepticism he must tell us what the a priori element of cognition is. He answers this by drawing a distinction between two types of ‘sensuous intuitions in general’ (Kant 1998: B34/A20, 173) – pure and empirical. The latter corresponds with Humean raw sense data – the material properties of an object that construct the way in which it is immediately presented to us (Broad 1978: 20). These will include colour, temperature, etc., but they are at this stage merely chaotic jumbles of impressions. This is known as the *matter of an appearance* (Gardner 2002: 72) – that part of an appearance of an object that is concerned with the manifold of impressions. But this is not enough for sensible intuition. We need to organise these impressions into a coherent form, and Kant argues that this cannot be something that is provided by empirical intuition:

Since that within which the sensations can alone be ordered and placed in a certain form cannot itself be in turn sensation, the matter of all appearance is only given to us *a posteriori*, but its form must all lie ready for it *a priori*, and can therefore be considered separately from all sensation.

(Kant 1998: B34/A20, 173)

There is something in addition to mere sensation therefore that is essential to appearances – the mind can only be cognitively conscious of its experience as something if it is organised (Gardner 2002: 72). And Kant is sure that the form of experience is provided a priori by the mind. This is, of course, the basis of his accusations of TR levelled at Hume – the structure and form of experience is not simply given in raw sense data but as imposed on to it by the mind. A good way to look at the form of experience is to see it as something that is given in neither sensation nor thought but is clearly distinct from both of them. Contra Hume it is external to sensation because it is not derived from it, and contra Leibniz it is external to thought because it exists prior to the application of any concept (Gardner 2002: 72). This radical new idea of Kant’s is called *pure intuition* (Broad 1978: 20; Gardner 2002: 73). In formulating it, Kant must therefore establish what makes it distinct from sensibility and thought. As he argues, ‘if I separate from the representation of a body that which the understanding thinks about it, such as substance, force, divisibility, etc., as well as that which belongs to sensation, such as impenetrability, hardness, colour, etc., something from this empirical intuition is still left for me, namely extension and form’ (Kant 1998: B35/A21, 173). Proving the existence of extension and form is therefore the task of the ‘Aesthetic’. As we will now see,

extension involves the pure intuition of space and form the pure intuition of time.

### 3.3.2 *The 'Aesthetic' II: pure intuition as spatiotemporal*

I do not wish to get bogged down with specifics about how Kant thinks that space and time are forms of pure intuition, not least because there is simply not the space here to go into details. I will restrict my comments to the following. In asserting that space and time constitute the form of sense experience Kant is basically saying that it is they that are the elusive 'X' that we have been looking for and which makes synthetic a priori truths possible. He uses the example of geometry to prove that space is the synthesising 'X' which connects predicate and subject together in geometrical judgements (Kant 1998: B41, 176; Gardner 2002: 73). The basic principles of geometry can be derived from the pure intuition of space (e.g. the principle that two parallel lines cannot cross) without any need for the sense experience of anything. But it is central to synthetic a priori judgement because when we do experience extended bodies they must conform to these pure intuitive principles. And so geometrical principles are good examples of how we can identify necessary a priori synthetic truths that help to extend our knowledge. We can therefore study space independently of physical objects but the truths we arrive at as a result help us to gain knowledge when we do experience things. In this regard, Kant wants us to regard space as the form of our experience of outer objects (Kant 1998: A22, 174). The reason why we can posit the things that we experience as existent 'out there' is because we represent them as being in space. And time is the form of our experience of inner objects. Kant thinks that our inner states (e.g. emotions and physical pain/pleasure) are represented to us as being in time (Kant 1998: A22, 174). Moreover, he is insistent that this inner intuition of time is the condition of possibility of the positing of outer objects as being in time as well. Without the pure inner intuition of time we could not possibly think of the objects in space as also occupying a temporal position.

### 3.3.3 *Pure intuition and transcendental idealism*

Given that we are primarily interested in opening up a debate between Kant's transcendental idealism and, ultimately, Bhaskar's TR and DCR, I think some comment on how all of this connects up to the Kantian notion of the object-for-us would be useful. We have seen that Kant wants to distinguish between two types of human intuition – sensible (the matter of experience) and pure (the form of experience) – and that the latter is what must be presupposed for any experience to be possible and, as we have just seen, how it takes the form of spatiotemporality.

This, again, is a revolutionary claim by Kant and, as such, forms a central plank of his Copernican Revolution. What he is basically saying is that space and time are creations of pure intuition. In other words, when we talk of the object-for-us (i.e. the material objects of sensible intuition) we say that it exists in a spatiotemporal dimension that is of our own making and only of our own making. Space and time cannot exist in the dimension of the object-in-itself. As he argues 'space represents no property at all of any things in themselves' (Kant 1998: A26/B42, 159) and 'we dispute all claims of time to absolute reality . . . time . . . cannot be counted as either subsisting or inhering in the objects in themselves' (Kant 1998: A35/B52–A36, 164). And so the object-for-us as a material thing, as it is experienced by us, and spatiotemporality, which is its condition of possibility, are transcendently ideal. What is crucial to remember is the paradox of Kantian epistemology. It is because of transcendental idealism that Kant thinks that we can talk about empirically real objects. We saw above that once the object-for-us has been established using transcendental idealist principles then it assumes an empirically real existence – as an object that exists from the human standpoint it is a very real part of our experiences. This is the paradox of Kantian idealism – subjectivism is the only valid way we can seek answers to ontological questions. What Kant seeks to do in the 'Aesthetic' is to substantiate those claims that were already made in the 'Preface' by filling them out with the idea that space and time are subjective in nature. The object-for-us is ideal and at the same time empirically real (Kant 1998: A35/B52, 164). The condition for its empirical character as an appearance (a posteriori) is that it has a purely intuitive a priori spatiotemporal form. We also know that this is expressed as subjectivism regarding transcendental (i.e. ontological) questions but realism regarding the character of the object-for-us when it has been transcendently established.

This opens up an interesting debate between transcendental idealism and realism on what reality consists of. It is fairly obvious that Kant's object-for-us is his way of saying that the real object must be considered 'from the human standpoint' (Kant 1998: A26/B42, 159). But from what we know of transcendental realists, it is equally clear that for them it must be considered as something given to us as it exists in itself, independently of our standpoint. In the context of what we have just said about the 'Aesthetic', the difference can be expressed as follows: for transcendental idealism the form of experience inheres in pure intuition, whereas for TR it inheres in spatiotemporality-in-itself. Thus, for transcendental idealism, reality is a *conditional* reality (conditional upon the constituting subject), whereas for TR it is an *absolute* reality in that the conditions of possibility of experience do not lie in the subject of experience but would continue to exist even if there were no subjects to experience anything. But we have already



seen that although empirical realism is very much a possibility for Kant he insists that TR is not.

The case for transcendental idealism does not simply rest on positing the object-for-us because as we know this involves a sort of ontological agnosticism regarding the object-in-itself. If Kant says that spatiotemporality cannot be in-itself then he is doing more than simply restricting metaphysics to questions concerning the conditions of possibility of experience. He is making what can only be described as a rationalist ontological claim, albeit a negative one – that we can know a priori that space and time are not part of absolute reality. For example, Kant argues that the principles of geometry demonstrate that space is not absolutely real. If the truths about geometry can be seen to be synthetic a priori, then so too will the truths about space because the objects of geometry are objects in space. For example, it is a synthetic a priori truth that two straight lines cannot enclose a space – it is impossible for us to ever have any such experience. The proposition is therefore a necessity. But Kant shares the Humean notion that necessity cannot be derived from experience. But, contra Hume, it is nonetheless a necessity that we can know about. The only alternative for Kant was that it is synthetic a priori, and so geometrical truths must be about the objects of our mode of cognition. And so objects in space can have an existence only in the subjective conditions of our intuition (Gardner 2002: 102).<sup>4</sup>

We will say more about this debate between transcendental idealism and realism when we consider Bhaskar's critique of Kant shortly. But for now it is important to take stock of what the 'Aesthetic' has done to substantiate the Kantian hypothesis that synthetic apriorism is the necessary condition of possibility of knowledge. As such it has established the twofold character of human sensible intuition – the matter (appearances) and form (subjective spatiotemporal) of experience. With this Kant has established how he thinks that objects are given to us in experience. But the 'Aesthetic' does not explain how he thinks that thought (concepts) relates to these intuited objects. That is, Kant still has to tell us how the objects of sensible intuition can become objects of *thought*. The 'Aesthetic' has established the intuitive conditions for the structure of experience but it has not established the *conceptual* conditions. This task is the job of the 'Analytic'.

### 3.3.4 The 'Analytic'

The 'Analytic' is concerned with the relation of thought to objects as they are given in intuited space and time. The theses in the 'Aesthetic' and the 'Analytic' are linked – a priori conceptual forms organise the manifold of intuition, as we will see. Together they form the twofold character of the object-for-us – its sensible character in intuitive



cognition and its conceptual character in discursive cognition (Broad 1978: 73). Both are obviously indispensable to transcendental idealism. Although Kant wishes here to ground a priori conceptualisation in the mode of cognition – thereby opening up another front in his war against empiricism and rationalism – his efforts are mainly concentrated in proving that pure reason is necessary for knowledge. And so it seems that just as in the ‘Aesthetic’, regarding the conditions of possibility of intuition, Kant is directing most of his firepower at empiricism, except here on the conditions of possibility of understanding the manifold of intuition once we are presented with it in experience. The main assault on rationalism is left until the critique of transcendent metaphysics in the ‘Dialectic’.

In subsection 1.2.2 and elsewhere (Agar 2004: 166) I touched upon the subject matter of the ‘Analytic’ as part of my introduction to Kantian epistemology. I argued that, for Kant, the mind could only understand appearances (raw sense data) if it had what I called *conceptual understanding* and explained that he posited two types of concept, particular and general concepts (or categories). We saw that the categories were general concepts by virtue of their a priori nature, whereas the other types of concept were empirical. In other words, some concepts were formed a posteriori whereas others were purely a priori in nature. In the ‘Analytic’ Kant will argue that a priori conceptual understanding is just as essential to the process whereby we can cognise objects as the a priori forms of experience as it is to the process whereby these objects are given to us in sensation in the ‘Aesthetic’. In other words, just as pure intuition performs a vital object enabling (i.e. transcendental) function in the ‘Aesthetic’ when it comes to the question of how sensibility is possible, so conceptual understanding performs this role in the ‘Analytic’ when it comes to the question of how understanding is possible.

The general thrust of the ‘Analytic’ is anti-empiricist because it is concerned with establishing that there is nothing in experience itself that is its condition of possibility but rather appearances can only be cognised by a priori structures of the mind. As we saw in subsection 1.2.2, these included concepts of *cause* and *unity*, which were central to how the mind can understand (i.e. have thoughts) about events in the world. Now, the idea that causation and unity fall within the remit of a priori forms of cognition should make perfect sense given Kant’s Copernican Revolution. He insists that the commonsense assumption that the empirical world is subject to causal rules and that objects have intrinsic unities is evidence that the concept of causality and unity are not in fact supplied by the empirical world at all (as Hume insists it is) but by the mind a priori. It carries necessity therefore because the conditions of possibility of experience are not supplied by something

intrinsic to appearances. Kant calls these *transcendental logical* principles (Kant 1998: A56–A57/B80–B81, 196), which fit in with what I was saying in subsection 3.2.4 about the relation of thought to its objects in transcendental idealism. A good way to understand this idea that we can have pure thoughts about objects is to compare pure and empirical thought with pure and empirical intuition. As Kant argues, ‘since there are pure as well as empirical intuitions (as the transcendental aesthetic proved), a distinction between pure and empirical thinking of objects could also well be found’ (Kant 1998: A55/B80, 196). Just as there are pure forms of intuition (space and time) that are the condition of possibility of sensibility, so there are pure forms of understanding that are the condition of possibility of knowledge as well as experience. In both, the transcendental conditions of possibility are provided by something *a priori*. In intuition it is provided by pure (spatiotemporal) intuition, and in understanding it is provided by pure thoughts about objects (Gardner 2002: 126). In other words, although it is true to say that experience establishes an empirical relation of thought to its object, Kant’s categories of pure understanding mean that this presupposes an *a priori* relation wherein the *object itself is originally constituted* (Gardner 2002: 127).

The distinction between the empirical relations of thought to its object and the categories of pure understanding can be expressed as the distinction between empirical synthesis and *a priori* synthesis (Broad 1978: 80–1), analogous to the distinction between the matter and *a priori* forms of intuition. As Kant argues:

By synthesis in the most general sense, however, I understand the action of putting different representations together with each other and comprehending their manifoldness in one cognition. Such a synthesis is pure if the manifold is given not empirically but *a priori* (as is that in space and time).

(Kant 1998: B103/A77, 210)

So in empirical synthesis ‘the manifold’ is given to us *a posteriori*, but in pure synthesis it is given to us *a priori*. An example of the former would be my hearing a noise that through repeated acquaintances with it in the past I can now describe as a dog barking. If I cannot see the dog now but only hear it because it is behind a wall I nevertheless conjure up in my mind a visual image of a dog to which I attach the sounds that I am now hearing. Because of my past experiences I have learnt to discriminate certain noises and sights that I associate with the event of a dog barking. As I hear the barking I call up in my mind associated *sensa* such as the way dogs look to me, the way they are to the touch, etc., known as the process of a *a posteriori* synthesis. But Kant thinks

that all of this presupposes pure synthesis, known as the *transcendental apperception*:

Now no cognitions can occur in us, no connection and unity among them, without that unity of consciousness that precedes all data of the intuitions, and in relation to which all representation of objects is alone possible. This pure, original, unchanging consciousness I will now name transcendental apperception.

(Kant 1998: A107, 232)

Kant makes the revolutionary claim that there is a general ground plan for the synthesising of various sensations into the percept of a physical object (in this case a dog). This is, as Kant says, 'the mere effect of the imagination, of a blind though indispensable function of the soul' (Kant 1998: B103/A78, 211) and is as such the tool with which we, as constituting subjects, construct the object-for-us. It is blind because 'we are seldom even conscious of it' and it is indispensable because without it 'we would have no cognition at all' (Kant 1998: B103/A78, 211).

It should be fairly obvious how Kant's insistence that the mind has this analytic function – the transcendental apperception – is crucial to his wider argument that the object of cognition is the object-for-us rather than the object-in-itself. We know that the unity of apperception in experience (i.e. the plurality of sensa that is my image of a dog that I hear barking) is something which, according to the likes of Hume, inheres in the appearance itself. For Hume no such transcendental unity of apperception existed and the subject instead was nothing more than a simple bundle of perceptions and qualities (Hume 1978: Bk I, Pt 4, §6, 252). Remember we said that this was why Kant accused Hume of being a transcendental realist – based on the assumption that the process of empirical synthesis is dictated by something within the raw sense data itself. But Kant thinks that the combination of the manifold of intuition relies on the transcendental apperception. I represent the sense data the way I do because of my unique *relation* to them. The end result, as we know, is that the object that has been synthesised is an object-for-me. Furthermore, because without pure synthesis Kant thinks that I cannot have any cognition at all, the object-for-me is the only way I can hope to develop knowledge of objectivity, as we have seen above. In accordance with Kant's Copernican Revolution, the structure and unity of objects that allow them to become objects of experience is dependent upon the activity of the constituting subject (Stern 1996: 25). And so we can see that in the 'Analytic' transcendental idealism takes up its essential Copernican task of grounding the object of our conceptualisation in the activities of the subject, whereas

in the 'Aesthetic' it was to highlight the subject's mode of receiving data (Gardner 2002: 193).

### 3.3.5 *Noumena and transcendental objects*

What I have called the constituting subject is perhaps more commonly referred to by Kantians as the *transcendental subject*. But I now want to say something more about Kant's attitude to the concept of an object-in-itself and, in particular, its relation to what he calls the concept of the *transcendental object* because it will be important when we go on to consider Bhaskar's critique of him.<sup>5</sup> (I want to say immediately that in this section I will deal with the *representation* rather than the *existence* of objects-in-themselves. In the 'Analytic', as we will see, Kant argues that we must at least assume that they must exist in order to ensure that our sensibility is not arbitrary, but that does not mean that we need to assume for the purposes of the 'Analytic' that they actually exist. The latter consideration is taken up in the 'Dialectic', which we will come to in a moment.) When Kant talks of the object-in-itself he usually means the *noumenological* object, or the object considered as it is independently of sensibility. But this is confusing because what Kant actually means when he refers to something noumenological is an object of pure intuition. A noumenon is thus, strictly speaking, an object as it is given exclusively to the understanding (Broad 1978: 199; Allison 1983: 242–3; Kant 1998: A248–A249/B305, 346–7; Gardner 2002: 200). This is contrasted with the empirical object produced by the transcendental subject known as the *phenomenological* object. Specifically, when we are transcendently reflecting (i.e. outside experience) he wants us to consider the categories. Noumena are therefore of epistemological concern. By contrast, the object-in-itself is a bare ontological concept in that it is something that is considered even independently of the categories (Gardner 2002: 201). The reason for the confusion<sup>6</sup> is that noumena and objects-in-themselves are both considered external to sensibility and so are both unknowable. When Kant talks about something being noumenological he simply means that it is not an appearance and so is unknowable (i.e. he is making an epistemological statement about it). But when he talks about objects-in-themselves he is usually referring to real material things that exist independently of our senses, forms of intuition and the categories (Broad 1978: 202). It is true that to say 'objects-in-themselves are unknowable' is to make an epistemological statement about them and so they are noumenological in that sense. But when it comes to concepts about the existence of objects-in-themselves then we move into the territory of ontology. The distinction should become clearer when we see that Kant subdivides noumena into positive and negative dimensions. This division is also

essential to his defence of the 'Analytic' from accusations that he is espousing a form of rationalism – that the categories actually give us access to knowledge of things-in-themselves.

In the final chapter of the 'Analytic', entitled 'The ground of the distinction of all objects in general into phenomena and noumena', Kant stresses that our dependence on the categories for knowledge means that coming to know objects as they are independently of experience is impossible. The categories are thus limited in their scope to their functioning in allowing for experience:

We have seen, namely, that everything that the understanding draws out of itself, without borrowing it from experience, it nevertheless has solely for the sake of use in experience. The principles of pure understanding, whether they are *a priori* constitutive (like the mathematical principles) or merely regulative (like the dynamical principles), contain nothing but only the pure schema, as it were, for possible experience . . . That the understanding can therefore make only empirical use of all its *a priori* principles, indeed of all its concepts, but never transcendental use, is a proposition that, if it can be recognised with conviction, points to important consequences. The transcendental use of a concept in any sort of principle consists in its being related to things in general and in themselves; its empirical use, however, in its being related merely to appearances, i.e., objects of a possible experience.

(Kant 1998: A236–7/B296, 339; A238–9/B298, 340)

When Kant contrasts 'the transcendental use of a concept' to 'its empirical use' he is making a distinction between *transcendent* and *immanent* knowledge (Gardner 2002: 199), the distinction being that the former is impossible whereas the latter is not. It would seem from this that the categories have a function only in ordering appearances (i.e. the object-for-us) and so cannot become transcendent objects. But we already know that Kant defines the categories as concepts of objects *in general* as opposed to merely concepts about empirical objects. The solution to this apparent contradiction hinges on the distinction between *knowing* an object (which requires it to be empirical) and merely *thinking* an object (which does not). Of the categories, Kant argues 'they do not have any use at all if they are separated from all sensibility, i.e., they cannot be applied to any supposed object at all; rather they are merely the pure form of the use of the understanding in regard to objects in general and of thinking' (Kant 1998: A248/B305, 346). The categories are therefore concepts which, when taken in their general (i.e. pure) form, are unknowable transcendental objects that can only be thought. This should make sense given the quotation I made from Kant in subsection 3.3.4 about pure thinking as the 'mere effect of the imagination,

of a blind though indispensable function of the soul'. For example, he would argue that it would be absurd to say that we can know anything about the concept of causation in its pure form. It has epistemological relevance only when it is applied empirically (e.g. to the explanation of why water boils when it is heated). It follows from all of this that Kant regards noumena in this transcendental sense as being subject to a definite or determinate mode of pure intuition and they are thus *positive* noumena (Kant 1998: B307, 360–1). They are positive in the sense that although they are unknowable to us they are at least capable of being known to minds other than human (e.g. God).

If positing objects that may be knowable external to human sensible intuition is evidence of a positive approach to noumena by Kant, he then presents a very negative version by pointing out to us that as far as we, as human beings, are concerned, the object-in-itself is not an object of sensible intuition and so is unknowable. In this regard, negative noumena refer to the epistemological status of object-in-themselves – as unknowable transcendental objects. And so in contrast to positive noumena Kant formulates a negative version that is equally important to the epistemological coherence of transcendental idealism. This important concept can be expressed in the following way. First, Kant says that it is true that in order for our knowledge to be of the object-for-us rather than the object-in-itself we must assume that there is something real outside our sensibility that is the cause of it (Allison 1983: 241). This might seem paradoxical if we had not already closely examined the object-for-us above. Kant insists that his Copernican Revolution can only be sustained if we have the concept of something 'out there', something indeterminate and real that is not an object of sensible intuition at all, otherwise we would be in the absurd position of believing that appearances are not caused by anything (Kant 1998: Bxxvi–Bxxvii, 115). In this sense, negative noumena take the form of, as it were, *non-objects*; a purely limiting concept (Hartnack 1992: 84–5). We have the concept of a 'something' quite beyond our comprehension, otherwise the object-for-us would not in fact be 'for-us' at all and what we would be gleaning knowledge about would be the object-in-itself (Allison 1983: 238; Kant 1998: A286/B342–3, 379–80; Gardner 2002: 204).<sup>7</sup> This presupposes that we must have at least the concept of something that is beyond the limits of our mode of cognition otherwise presumably it would be limitless. Quite simply, Kant thinks that we need to posit the concept of an object-in-itself in order for the transcendental idealist principle that we can only know about the object-for-us to make any epistemic sense. He outlines what function negative noumena have when he says:

The concept of a noumenon is therefore merely a boundary concept, in order to limit the pretension of sensibility, and therefore



only of negative use. But it is nevertheless not invented arbitrarily, but is rather connected with the limitation of sensibility, yet without being able to posit anything positive outside the domain of the latter.

(Kant 1998: A255/B311, 362)

And so to posit this real object is to provide the 'boundary concept' which allows us to distinguish the object-for-us that we can know about from the object-in-itself that we cannot.

This positive-negative noumena distinction is central to Kant's analysis of transcendental realism. Again, this should be easy to grasp given our discussions above. Transcendental realism, according to Kant, involves the dissolution of negative into positive noumena. A good example of Kant's thinking can be seen in his contention that the idealist rationalist philosopher George Berkeley (1685–1753) was in fact employing TR categories. Berkeley argued that material objects did not in fact exist as *material* objects at all but had merely mental properties. As far as Kant was concerned this amounted to equating the object-in-itself with the object-for-us. And so, although Berkeley is usually considered as a hyperidealist, when subjected to Kantian criticism he turns out to be the worst kind of TR. We can express this accusation in terms of the distinction between positive and negative noumena – rationalists such as Berkeley argue that positive noumena are real and knowable and so fail to factor into their philosophy the 'boundary concept' of negative noumena. They pass from the negative to the positive senses thereby dissolving the former (Gardner 2002: 205). Similar errors can be detected in the work of Hume and Leibniz and for obvious reasons, given what we know of their respective philosophies. And so we can see that transcendental idealist epistemology is heavily reliant on sustaining the distinction between the two senses of noumena.

It is important to emphasise that all of this is of importance epistemologically – the Copernican Revolution can only be sustained if we posit concepts of positive and negative noumena. But does this mean that Kant thinks that his theory is dependent on there actually being things-in-themselves that exist apart from our assumption that there are? Remember what I said above – it is one thing to say that *concepts* of noumena are central to epistemology but it is quite another to advance the case for the *existence* of things-in-themselves that correspond to them. So at this stage it is relevant to ask if the Copernican Revolution depends on an ontological correlative to the epistemological agenda of transcendental idealism. Is it enough for Kant to be agnostic about the issue of things-in-themselves? It is to this issue that Kant turns in the 'Dialectic'.

### 3.3.6 The 'Dialectic'

We saw in subsection 3.2.2 that Kant rejected the terms of ontology by attacking the notion that we can ask and get the answers to philosophical questions about the object-in-itself. Instead he formulated a much more restricted metaphysics – empirical metaphysics – but nevertheless we saw that the object-for-us could be sustained without compromising the commonsense realist idea that our empirical knowledge has to be about an object external to intuitive sensibility. And then in the final sections of the 'Analytic' we saw that the idea that objects-in-themselves can be thought is as much ontological theory as Kant is prepared to countenance. Furthermore, his conceptions of noumena, which are absolutely essential to the coherence of the object-for-us, should be seen as the filling out of his metaphysics of experience.

The ground work of the 'Dialectic' has therefore already been laid in the preceding sections of the *CPR*. It should therefore not surprise us when it turns out that questions about transcendent objects in the 'Dialectic' are considered from the perspective of the Copernican Revolution and centre on the object-for-us of the constituting subject (Gardner 2002: 214). Ontological questions, as it were, are to be asked about the object-for-us. This represented Kant's most vociferous attack on rationalism, and so if the 'Aesthetic' and the 'Analytic' contained most of the ammunition to be used against empiricism, the 'Dialectic' contained the majority of the anti-rationalist content of the *CPR*. Put at its most simple, Kant undertook to demonstrate that it was perfectly natural for the human mind to speculate about the existence of the object-in-itself and the attendant realist application of terms such as causality, spatiotemporality, unity and substance because it is logical that we seek complete justification and explanation for every truth claim that we make about the world (Broad 1978: 208; Allison 1983: 36). However, this was nothing more than a *transcendental illusion* (Broad 1978: 206; Allison 1983: 196–7; Kant 1998: A295–B352, 385; Gardner 2002: 214–6). As always, Kant links this necessary error, as it were, to the Copernican Revolution:

Transcendental illusion . . . cannot be avoided at all, just as little as we can avoid it that the sea appears higher in the middle than at the shores, since we see the former through higher rays of light than the latter, or even better, just as little as the astronomer can prevent the rising moon from appearing larger to him, even when he is not deceived by this illusion.

(Kant 1998: A297–B354, 386)

The task for the 'Dialectic', then, is rather straightforward: to



highlight the transcendental illusion so that we are no longer deceived by it. In this way, this section of the *CPR* is central to the defence of the object-for-us and the rejection of the fallacious idea that we can come to knowledge of the object-in-itself. Indeed, everything that Kant argued for in the 'Introduction', the 'Aesthetic' and the 'Analytic' was a demonstration of how important he thought it was to restrict the application of these terms to the domain of possible experience. In the 'Dialectic' he elaborated on this theme by arguing how rationalist philosophers have sought to give practical application to the illusory propensity of the mind to think that it can know things beyond the realm of experience. In other words, Kant embarks on a widespread attack on the error, as he sees it, of giving philosophical credence to a priori analytical thought – the search for unconditioned totalities (i.e. unconditioned by experience) and absolute unities (Kant 1998: A324–326/B380–382, 400–401; Gardner 2002: 217). This stands in stark contrast to the mind's use of a priori synthetic thought, which involves what Kant took to be the correct application of important scientific and philosophical terms (causality, unity, spatiotemporality, etc.) to objects of possible experience. This distinction is important because it is the means of how Kant establishes the difference between human reason and human understanding. Previously in the *CPR* the former referred to the intellectual capacity of the mind as a whole and so included the latter. But now reason refers to the transcendental illusion of supposing that ultimate explanations for things unconditioned by experience can be found whereas the understanding is the faculty in which we employ a priori synthetic concepts.

While Kant thought that it was natural for us to seek ultimate explanations, he did not have in mind the traditional rationalist method of a priori analytic reasoning. In contrast to, for example, Leibniz, Kant thought that reason referred not to objects-in-themselves but to our judgements about those objects located in the understanding (Gardner 2002: 219). In other words, rather than reason having intrinsic concepts it bases them on those of the pure understanding (Kant 1998: A320/B377, 398–399). But, of course, our concepts of unconditioned objects do not yield knowledge of real unconditioned objects. It therefore involves pseudoreasoning, which Kant also calls *dialectical* reasoning.

This is not to say that reason is seen by Kant as some sort of necessary evil. Rather, he thinks that it provides regulation and guidance to the understanding. Put simply, he thinks that philosophical speculation places useful demands on empirical science. For example, when Newton discovered gravity he was not just interested in explaining his experience of the apple's descent from the tree to his head (if we attribute any literal truth to this anecdote) but in deducing, via hypotheses, universal necessary laws of nature to which all material objects

were subject. That is, he was intent on discovering not just the laws of gravity as they affect appearances but the laws as they really are independently of our experience of them. Now, Kant thinks that this quest is ultimately fruitless, as we know, but nevertheless important in guiding and regulating the understanding, including the character of the *categorical* laws of gravity and causation of the constituting subject. And so dialectical thinking is important to Kant's theory of science – it was essential to the development of hypothetico-deduction. The error of transcendent metaphysics and its attendant a priori analytical thought may be redescribed as the mistaking of the regulative function of the understanding for a constitutive one (Kant 1998: A644/B672, 591; Gardner 2002: 223).

Enough has been said by way of a discussion about the transcendental idealist approach to epistemology and ontology. We now have a clear understanding of how Kant tries to solve antinomial problems by centring the world of objects on the transcendental constitutive subject. We now need to look more closely at how CR and DCR sit with the notion of the object-for-us.

### 3.4 Critical/dialectical critical realism and empirical metaphysics

#### 3.4.1 *Critical realism and 'the Kantian road'*

We saw in subsection 2.3.1 that the DCR alternative to ontological monovalence was grounded in a realist epistemology that is sustainable because it allows for what I have called a coherent theory of objectivity. This pre-DCR theory is itself connected intimately to a realist inversion of Kantian idealism which we have already explored in subsection 1.2.4. We saw that Bhaskar wants to place the structures that make objects knowable in the object-in-itself. And so he rejects Kant's insistence that we can only know anything about the world if it is understood as an object-for-us. Rather than the subject matter of metaphysics being dependent on the a priori synthetic activities of the constituting subject (and thereby restricted in their competency), Bhaskar is sure it is an intrinsic feature of the object-in-itself. It is in what I am simply going to call the real a priori that we can locate the conditions of possibility of experience. Bhaskar lies firmly within the tradition of TR but given that he adopts the Kantian method of *critique*, his thinking does not automatically involve empirical realism.

The best way to justify the claim that Bhaskar constructs a TR that does not equal empirical realism is to acknowledge the considerable intellectual debt he owes to Kant. In *PN* Bhaskar says that 'if philosophy is to be possible (and I want to contend that it is in practice

indispensable) then it must follow the Kantian road' (Bhaskar 1998: 5). This statement involves, first, the affirmation of the need for some of the basic principles at work in Kant's a priori method in philosophy. We have seen in subsection 3.2.2 that Kant formulated a critical transcendentalism, which is the assertion that the conditions of possibility of knowledge must involve a critical study of how the mind cognises objects rather than assuming that they are simply given to us. Bhaskar would share the sentiment that epistemology needs a priori philosophical investigation into the process whereby the mind can cognise objects and that this process is absolutely essential to the conditions of possibility of knowledge. Valid accounts of causal laws 'are not exhausted by atomistic facts and their conjunctions' (Bhaskar 1978: 27). So, in other words, Bhaskar would side with Kant against empiricistic and rationalistic forms of transcendentalism. A priori philosophical investigation must be carried out into the conditions of possibility of experience. I mentioned in passing in subsection 1.2.4 how Kantian transcendental idealism is concerned with evaluating the results of science. This should now make perfect sense given that we have spent much of this chapter discussing its empirical metaphysical foundations. As we have seen in subsection 3.2.4 the major difference between Kant and the empiricists is that he wants to ground the conceptualisation of experienced objects in synthetic a priori structures rather than being content with remaining at the synthetic a posteriori level. In short, philosophical knowledge of spatiotemporality and the categories is arrived at through the use of *retroductive* techniques. Now, we saw above in subsection 3.2.4 that Kant tried to pre-empt accusations that he was an empiricist by drawing a distinction between a posteriori and a priori knowledge – the former being contingent and empirical and the latter being necessary and a priori despite the fact that it was deduced from experience. In subsection 1.2.3 we learnt about Bhaskar's contention that a priori philosophical knowledge was essential to science. We also saw that he thought it began at the level of experience – in order to identify ontological truths about the stratified and emergent character of the world we need first to examine specific objects in experimental conditions. So Bhaskar would share the Kantian notion that the formulation of a priori philosophical truth is possible (contra empiricism) but that it cannot be deduced from logical principles and instead must rely on there first being experience of the world (contra rationalism). In a very important sense philosophical truth is derived from experience and so we have Bhaskar's very own real version of Kantian a priori methodology.

We know that the synthetic a priori is, from a realist perspective, heavily bound up with ontic relativism (i.e. the object-for-us). We saw in subsection 3.2.1 that this constituted Kant's metaphysical idealism. Now, epistemology will be subjective and thus relativist in the same

way as the object-for-us is subjective and relativist – both are dependent on our cognitive capacities that we bring with us to experience. But we know that whereas for Kant the grounding of what is a priori in the human consciousness involved the dissolution of TR ontology it was the source of his idealist ontology. Irrespective of our particular understanding of the object-for-us Kant thinks that, as Andrew Collier puts it, ‘we necessarily apply the same spatio-temporal grid and the same categories to raw material received through the senses from the same things-in-themselves’ (Collier 1994: 86). The constant nature of key ontological concepts such as spatiotemporality and the categories convinced Kant that ontology could be preserved despite the dissolution of ontological realism.

In short, with ontological idealism secured it follows that Kant thinks epistemological relativism can be avoided and our knowledge can accurately reflect the object-for-us. As we saw in subsection 3.2.2 the Copernican Revolution in science and metaphysical idealism are logically connected: to make the epistemological statement that objects must conform to our mode of cognition is to presuppose that by its nature it has a propensity towards conformity.<sup>8</sup> And we saw that Kant was sure that with realist epistemic objectivity it is impossible to sustain coherent ontology and epistemology. But if we redefine what ontology and objectivity actually mean and what they refer to in the sense that they no longer mean understanding the object-in-itself but the object-for-us then (and only then, Kant would argue) can they become useful tools for philosophy. He thinks that there is simply no other way in which we can make ontology and epistemology conform to commonsense realism. This should be fairly obvious given our discussion of Kant’s critique of transcendental realism in subsections 3.2.2 and 3.2.3, where we saw that he was sure that only transcendental idealism could sustain the commonsense realist idea that our knowledge must conform to something outside of mere appearances. We saw that, for Kant, only ontology of the object-for-us with attendant synthetic a priori propositions could sustain a coherent account of the conditions of possibility of experience. We saw that he was sure that TR could not sustain commonsense realism because it either projected the empirically ascertainable features of objects on to the metaphysical (Leibneizian rationalism) or dissolved the metaphysical altogether (Humean empiricism). When this happens ontology is dissolved into epistemology, which in turn is hardly sustainable because it does not have a subject matter outside itself; that is, there is no object to which our mode of cognition conforms.

Now, the important point in all of this is that whether one is a transcendental idealist or realist in the rationalist or empiricist fold this question of the relationship between objects and our mode of cognition simply assumes that the former are transparent to reason – this is

what pre-Copernican and Copernican adherents mean when they say that either the object-in-itself or our mode of cognition is in 'conformity'. The only difference between the two classical approaches is that for Kant pre-Copernican epistemology is unsustainable because of its ontological errors – the conformity of the object to our cognition is premised on a metaphysical theory that cannot sustain an adequate distinction between the two (and we have seen how even Hume is guilty of this error despite his candidness about the death of metaphysics). Kant does not question the basic assumption of pre-Copernican philosophers that there is a fairly straightforward conformity – he just questions the *direction* of the conformity. Thus, they all (Kant included) embrace epistemic absolutism – we can accurately account for the object (whatever we say it comprises) in our theories because of this fundamental conformity. Now, Bhaskar is keen to affirm the importance of the Copernican Revolution in the generic sense that our knowledge will be determined by subjective factors. He agrees that the object-in-itself is not simply given to cognition. But this does not mean that he wants to affirm Kantian epistemic absolutism. To be sure, a rich Kantian heritage is important to our understanding of what Bhaskar calls the *transitive* dimension (Bhaskar 1978: 21). In *RTS* he says that:

men never construct their knowledge from scratch. It stands to them always as a given product, a social transmit; which they must themselves reproduce or partially transform. The Copernican Revolution in the transitive dimension of the philosophy of science thus has the profound implication that man never creates, but only changes, his knowledge, with the cognitive tools at his disposal.

(Bhaskar 1978: 148)

And in *PN* he stresses that scientific knowledge is a product of the sociohistorical conditions in which it functions:

if the general form of a philosophical investigation is into the necessary conditions for social activities as conceptualised in experience, then it must be recognised that both the activity and its conceptualisation may be historically transient; that the activity may depend upon the powers people possess as material things rather than just as thinkers or perceivers . . . On this conception, then, both the premises and conclusions of philosophical arguments remain contingent facts, the former (but not the latter) being necessarily social, and hence historically transient.

(Bhaskar 1998: 5)

In short, the transitive dimension is made up of the raw materials of science (antecedently established facts and theories, paradigms, models,

methods and techniques of inquiry) specific to each historical context of scientific investigation. Our knowledge of the world around us will depend on the way that we look at it. It was this tendency that commits Bhaskar to epistemic relativism within the domain of science (but not philosophy, as I will explain in a moment) whereas Kant remained convinced that our approach to understanding would remain fairly consistent because of this alleged conformity of object to subject.

As we have just seen, explanations for epistemic theories are to be found in ontic presumptions. In the case of Bhaskar, the subject matter of science is not transparent to reason because it resides in an infinitely complex and differentiated world *outside* our minds. And so I want to suggest that Kantian epistemic objectivism and Bhaskarian relativism can be explained by their respective ontological idealism and realism. In short, because Bhaskar grounds the subject matter of science in the object-in-itself he, like Leibniz, Locke and Hume, argues that it is intelligible (i.e. it is capable of becoming the subject matter of science and philosophy) but, unlike them (and this is where he can sustain a coherent *transcendental* realism), that it is not transparent to reason. The difference in approach to epistemology between transcendental idealism, empirical realism and Bhaskar's TR is simply illustrated in Table 3.2.

Given this massive distance between the way we seek to gain knowledge of our subject matter and the subject matter itself it seems likely that scientific hypothesis formation and philosophical propositions will be a fairly contingent (in the sense of being historically relativist) affair. As Bhaskar says, 'on this conception, then, both the premises and conclusions of philosophical arguments remain contingent facts, the former (but not the latter) being necessarily social, and hence historically transient' (Bhaskar 1998: 5).

In the next sentence Bhaskar affirms Kant's principle in CPR that philosophical truths must be deduced from scientific results when he says that '[i]t is only in this relative or conditional sense that philosophy can establish synthetic a priori truths (truths about the world investigated by science)' (Bhaskar 1998: 5). This is what I meant above when I said that Bhaskar's (and Kant's, for that matter) philosophy is dependent on science for it develops 'truths about the world investigated by science ... on the basis of ... some more or less determinate social form'. In this way 'the premises ... of philosophical arguments [are]

Table 3.2 Approaches to epistemology

	<i>Object-in-itself</i>	<i>Is the subject matter of science transparent to reason?</i>
Transcendental idealism	Unknowable	Yes
Transcendental realism	Knowable	No
Empirical realism	Knowable	Yes



... necessarily social and hence historically transient'. But this does not mean that Bhaskar advocates philosophical relativism at all because it is one thing to say that the premises of philosophy are contingent but quite another to say that the conclusions are. The a posteriori information that philosophers will use to come up with propositions about the world will be historically transient. He continues, '[p]hilosophy then, operates on the basis of pure reason. But not by the use of pure reason alone. For it always exercises that reason on the basis of prior conceptualisations of historical practice, of some more or less determinate social form' (Bhaskar 1998: 5). Nevertheless, he thinks that philosophers can use determinate social forms to formulate fairly constant truths. He does this in *Reclaiming Reality* (RR) by drawing clearly to our attention how philosophy and science differ:

A philosophical ontology will consist of some general account of the nature of the world, to the effect that it is structured and differentiated, whereas a scientific ontology will specify the structures which, according to the science of the day, it contains and the particular ways in which they are differentiated.

(Bhaskar 1993b: 150)

And in *PN*:

philosophy can tell us that it is the condition of the possibility of scientific activities ... that the world is stratified and differentiated. ... But it cannot tell us what structures the world contains or how they differ. These are matters for substantive scientific investigation. Scientific activities are contingent, historically transient affairs ... On this conception, then, philosophy is distinguished by the kinds of considerations and arguments it employs. It does not consider a world apart from that of the various sciences. Rather it considers just that world, but from the standpoint of what can be established about it by a priori argument, where it takes as its premises generally recognised activities as conceptualised in experience.

(Bhaskar 1998: 5, 6)

So philosophy uses scientific evidence as the basis of its apriorism. This is what Bhaskar meant in the passage above when he says that 'both the premises and conclusions of philosophical argument remain contingent facts, the former (but not the latter) being necessarily social, and hence historically transient'. The premises are contingent because they use scientific results as their starting point. But Bhaskar thinks that the conclusions that are drawn in philosophy about the object-in-itself, although it has depended on science to provide the 'data for its



results' (Bhaskar 1998: 4), are universal. This is because they are extrapolating from science's understanding of particular objects what the world in general must be like for science to be possible in the first place. But because these universal propositions are derived from data that is essentially contingent we must always remember that 'philosophical arguments remain contingent facts'. That is, they have universal import but are susceptible to revision should this be necessary. As Bhaskar tells us, 'the transcendental consideration is not deployed in a philosophical vacuum: it is designed to situate or replace an existing theory: and may of course come, in time, to suffer a similar fate' (Bhaskar 1998: 6). Thus we have ontological realism and epistemic relativism. We will see now that this distinction hinges on Bhaskar formulating a version of apriorism that can sustain coherent concepts of natural necessity and universality. As will be discussed, Bhaskar thinks that only epistemic relativism based on ontological realism can achieve this. We will see that the Copernican Revolution, grounded in empirical metaphysics, cannot sustain these crucial epistemic concepts, despite Kant's insistence, as we saw, that only he could deliver them.

### 3.4.2 *Bhaskar's critique of Kantian ontology and epistemic absolutism*

It is obvious from our discussion here that in following 'the Kantian road' Bhaskar contends that philosophy:

must reject two presuppositions which are central to Kant's own philosophical project, viz. that in any inquiry of the form 'what must be the case for  $\phi$  to be possible?' the conclusion,  $X$ , would be a fact about us and that  $\phi$  must invariably stand for some universal operation of the mind. That is to say, it must reject the idealist and individualist cast into which Kant pressed his own inquiries.

In fact, if the general form of a philosophical investigation is into the necessary conditions for social activities as conceptualised in experience, then it must be recognised that . . . its analysis may establish transcendental realist, rather than idealist, and epistemically relativist, rather than absolutist (or irrationalist), conclusions.

(Bhaskar 1998: 5)

In the first paragraph Bhaskar is staking out the territory for a realist interpretation of the a priori propositions of philosophy which Kant had classified as synthetic. In his words, philosophy must 'reject the idealist and individualist cast into which Kant pressed his own inquiries'. We will deal with Kant's 'individualist' errors in the next section when we look at the implications that the synthetic a priori method

has for the social sciences. For now, we must examine the CR critique of Kant's method (not least because it provides the foundations for Kantian individualistic anti-naturalism anyway).

In *RTS* Bhaskar tells us that for transcendental realists in the Bhaskarian mode there are three criteria for the ascription of causal laws corresponding to what he calls Humean, Kantian and Bhaskarian moments in any scientific inquiry (Bhaskar 1978: 163–4):

- 1 Is there an empirical regularity which constitutes a *prima facie* candidate for a law? [Humean]
- 2 Is there some reason, other than the regularity, why the predicates instantiated in the law-like statement should be conjoined? [Kantian]
- 3 Is this reason located in the enduring powers of things and the transfactually active mechanisms of nature? [Bhaskarian]

This threefold process is referred to by Bhaskar as 'a characteristic kind of dialectic in which a regularity is identified, plausible explanation for it is invented and the reality of the entities and processes postulated in the explanation is then checked' (Bhaskar 1978: 145). The Humean level should be clear enough at this stage – all we need for the ascription of a causal law is the observation of a constant conjunction of events. Someone committed to the classical empiricist philosophy of science will therefore merely ask 'is there a regularity such that whenever C then E?' (Bhaskar 1978: 166) and if there is then the predicates of the law-like statement are joined and we have a causal law. We saw in subsection 3.2.4 that this was because of the Humean contention that empirical synthesis was the predicate of all scientific knowledge (i.e. because Hume thought it was impossible to have knowledge that extends beyond what is gleaned from sense experience itself, then natural necessity/universality were impossible). The 'X' that relates thoughts to objects was sense impressions, thereby negating any attempt at identifying an objective basis for the distinction between 'necessary and accidental sequences' (Bhaskar 1978: 149). But, as we know, Kant insisted that 'X' was not an intrinsic feature of sense impressions in themselves as they were presented to us but was instead provided by identifiable *a priori* conditions of possibility of us having sense impressions in the first place. Given this *a priori* status attributed to human cognition that was essential for synthetic knowledge to be possible at all, a second level was needed because at last an objective basis for the distinction had been found.

The move from (1) to (2) made by Kant was because he thought that Humeanism was a necessary but insufficient basis on which to ascribe universality to causal laws. Even though for Kant observing a constant conjunction is insufficient to ascribe causal relations to a set

of predicates, he thinks that it is nevertheless necessary. In other words, he thinks that statements about objects that carry universal import and natural necessity will involve making metaphysical propositions about them on the basis of *their manifestation to us as empirical regularities*, which he simply takes as a given. Accordingly, that the world is made up of empirical regularities is a Humean ontological contention (whether Hume acknowledges it or not is irrelevant), albeit an insufficient one, that we can simply accept. This is because, as we know, Kant accepts Hume's assertion that appearances in open systems are governed by empirical regularities. It was this empiricist 'fact' that made conceptualisation of objects possible. Humeanism is therefore necessary, although we know that Hume himself denied that any metaphysical significance could be drawn from this conformity of cognition with the object. But – and this is where transcendentalism comes in – it is insufficient to leave it there because, as we know, Kant thinks that there are things underneath (or rather beyond) the empirical level wherein causal laws and unity between and within objects reside (i.e. spatiotemporality and the categories). No distinction is drawn between the empirical identification and universal applicability of laws. Kantian spatiotemporality and categories are, as it were, the (empirical) metaphysical pieces of the puzzle that Hume rejected.

Accordingly, Kant thinks that we can arrive at universal causal laws without denying the postulation that experience is made up of constant conjunctions. Causality depends upon us asking 'given a regularity, is there an explanation such that we can render it intelligible to ourselves that whenever C then E?' (Bhaskar 1978: 166). This involves 'creative model building in which plausible generative mechanisms are *imagined* to produce the phenomenon in question' (Bhaskar 1978: 145–6). These 'imagined' generative mechanisms are, of course, analogous to the Kantian categories. Despite Bhaskar's own qualification that modern transcendental idealist philosophers at the second level 'are perhaps more influenced by Wittgenstein than Kant' (Bhaskar 1978: 145), I want to propose (and I think that Bhaskar would agree) that the analogy is still credible. And so it is at this level that Kantian universality in terms of the identification of the object-for-us and its attendant causal properties and unities is made. Connecting all of this to the discussion in subsection 3.4.1, we might say that it is the grounding of the Copernican Revolution in an ontology of the object-for-us that ensures, Kant thinks, that epistemic concepts of universality and natural necessity which avoid the epistemic and ontic fallacies are sustainable.

It follows from this that, according to Bhaskarian TR, constructing imagined generative mechanisms as hypotheses regarding the observed empirical regularities is an essential component of science. But in *PN* Bhaskar suggests that if we remain at (2) (i.e. we do not try to establish that what is imagined is in fact real, as we will see in a moment) this

undermines the important principle accepted by Kant that philosophy needs to function as a kind of underlabourer for the sciences rather than as a competitor with them. We saw in Chapter 1 that this sort of competition featured heavily for Plato and, to a lesser extent, Aristotle. Bhaskar argues that philosophy should not compete with science:

For its task is to show what must be the case for the ensemble of scientific activities to be possible . . . It is thus especially important not to reify or hypostatize a conclusion in philosophy as referring to, or dependent upon, objects distinct from those investigated by the various sciences. Now to posit an object as noumenal (or unknowable) is already to hypostatize it. Hence one difference between transcendental realism and idealism is that, for transcendental realism, what is presupposed in any given scientific activity is at once a possible object of scientific explanation; so that what is apodeictically demonstrable is also scientifically comprehensible; that is, what is synthetic a priori is also (contingently) knowable a posteriori. Philosophy consists in an irreducible level of discourse; it does not constitute an autonomous order of being (whether such an order is conceived as real or glossed as merely ideal).

(Bhaskar 1998: 6)

What Bhaskar is getting at here is how idealist (or weak realist) rationalist philosophy involves actualism because it arrives at metaphysical conclusions about a world outside the concerns of science (in other words, it reduces being to the status of speculative pronouncements of the mind). And so he is getting at an important sense in which Kantian idealism can be associated with rationalism. Both philosophical systems violate the important principle that 'what is apodeictically demonstrable is also scientifically comprehensible.' In rationalism this is fairly straightforward as we have seen, for example, in subsections 1.2.1 and 3.2.3 in which we looked at the Leibnizean notion that sensibility required abstract theocentric metaphysics, which alone could arrive at complete understandings of the world outside the competency of science. But, as Bhaskar points out, Kantian philosophy, despite the intrinsic connection between it and science involved in the object-for-us, posits as its condition of possibility positive noumena (pure intuition) that are quite incomprehensible to science. We saw this in subsection 3.3.5 when Kant classified them in their pure form (i.e. not applied to science) as unknowable. For Bhaskar this is wrong because 'what is synthetic a priori is also (contingently) knowable a posteriori.' Thus, the synthetic a priori concepts that constitute the objects-for-us must presuppose noumenological pure intuition and so require a philosophical contention about a realm of being absolutely external to the subject matter of science but which must exist in order for it to be possible.

And so the object-for-us (which I will show in-itself, as it were, involves actualist errors) is dependent on the actualist mistake of hypostatizing pure intuition. Although Bhaskar makes no reference to negative noumena (i.e. the object-in-itself), I think the same criticism applies – the condition of possibility of the object-for-us is its distinction from the object-in-itself about which science can know nothing.

Bhaskar thinks that he can avoid such hypostatizing by positing a third level wherein the philosophical synthetic a priori is real and intelligible to both philosophy and science. In this, there is no philosophical realm beyond the competency of science but just a realm considered in different ways to science, as we have just seen in the last section. Moreover, I want to suggest that it is in this act, and this act alone, that the ascription of universality and necessity (or what I have described above as the basis for the distinction between necessary and accidental sequences) can in fact be sustained. This is because realist philosophical ontology is dependent on the contention that the subject matter of science does not present itself to us as constant conjunctions. The move from (2) to (3) is essential because the generative mechanisms of the Bhaskarian transcendental moment must be posited as properties of material objects-in-themselves. The ontological and epistemological implications of this, as it were, realist inversion of the Kantian categories is clear for Bhaskar:

But whereas for transcendental idealism the imagined mechanism is imaginary, for realism it may be real, and come to be established as such. What is imagined may be real; but what is imaginary cannot. 'Imaginary/real' marks an ontological watershed; 'imaginary/known to be real' an epistemic one.

(Bhaskar 1978: 146)

Bhaskar, on the one hand, marks out the ontological distinctions between himself and Kant by making the distinction between the 'imaginary' synthetic a priori objects of Kantian philosophy and his own 'real' ones. And, on the other, he marks out the epistemic distinction by making the distinction between the 'imaginary' and 'known to be real' knowledge. It is the postulation that imagined generative mechanisms are possibly real ones that marks the essential 'watershed' from Humean philosophy of science to which empirical metaphysics remains ensnared. For it is at this level that we consider the possibility that the a priori conditions of possibility of experience that Kant correctly insisted were essential prerequisites to science may in fact be intrinsic features of material objects-in-themselves. And so if in the move from (1) to (2) Kant devastatingly demolishes Humean ontological scepticism, then in the move from (2) to (3) Bhaskar manages a similar demolition of the implicit anthropocentric Humean ontology and its consequent

epistemic and ontic fallacies that I have argued Kant had attempted to reconcile with (essentially hypostatized) metaphysical propositions.

Let us look at this in more detail. Bhaskar thinks that (2) is insufficient because empirical metaphysics fails to sustain an adequate theory of universality because of its acceptance of Humean empirical realism:

For Kant accepts Humean empirical realism, particularly as embodied in the 'constant conjunction plus subjective contribution of mind' analysis of causal laws, that is to say, Hume's actualism. This is spelled out in the 'Postulates of Empirical Thought' where the domains of the real and the possible are reduced to the domain of the actual. In virtue of this he is unable to maintain the conditions of possibility of either experimental or applied knowledge in science.

(Bhaskar 1994: 204)

We saw in subsection 3.3.1 (the 'Aesthetic') that Kant's necessary/universal (i.e. metaphysical) object necessitated the addition of the *form* (pure intuition) to the *matter of appearance* that gives coherence to the chaotic jumble of sensations given to us by the material object-in-itself. In this way, Kant failed to show how the a priori propositions of his critical philosophy can be proven if their existence is known purely as a function of experience. As Bhaskar says, '[w]hat happens in transcendental idealism is that to sustain the concepts of the necessity and universality of laws (ontological) structure is *involututed* within the transcendental subjectivity of mind, in a radical de-ontologisation of the world' (Bhaskar 1994: 204). So Kant is as guilty as anyone of actualism which, as we know, is 'a condition, normally socially produced and maintained, of the alignment of the realms of the real, the actual and the subjective, whether the subjective be conceptual (as in Leibniz) or empirical (as in Hume)' (Bhaskar 1994: 204). In other words, this is how Kant commits the error of what we identified as epistemological subjectivism. What this basically means is that the object-for-us is the result of a process that begins at the a posteriori level of Humean constant conjunctions of events.<sup>9</sup> Kant, despite his castigation of Hume as a transcendental realist, never questions this basic anthropocentric Humean ontological contention.

This is linked to the problem in Kant of how the intellect can come to have knowledge (i.e. how we can have knowledge of the understanding-in-itself and not just an appearance of it) (Bhaskar 1994: 204). The key to understanding Bhaskar here is once again to highlight Kant's insistence that what is necessary (i.e. synthetic a priori propositions) can be thought but not known. We looked at this in detail in subsection 3.3.5 when Kant insisted that the categories functioned merely to allow for experience and that outside this context they were transcendent objects unknowable to the human mind. Bhaskar's point is that Kant

fails 'to show how we can have direct encounter . . . with the synthetic a priori propositions of the critical philosophy, that is, how they can be known and not just thought; or how we can have knowledge of the understanding-in-itself as distinct from an appearance of it' (Bhaskar 1994: 204). What Bhaskar is alluding to here is the rather curious notion of Kant's that we can formulate a priori propositions that thereby carry necessity, but they can only be known in terms of the way our minds experience the world and so are absolutely unknowable in themselves. In other words, they are necessities that cannot be *known* but only *thought* as necessities, as we saw. We cannot come to know them as necessities but only as contingencies through the prism of experience. The end result is, as Bhaskar says, a radical deontologisation of the world because what are supposed to be a priori necessities are '*involved* within the transcendental subjectivity of mind'. Natural necessity, so central to the avoidance of 1M identity theory (i.e. the identity of knowledge with being; subject and object) is lost.

By making ontology effectively subjective in order to give Humean empiricism an explicit ontological footing Bhaskar thinks that we arrive at an unsustainable subjectivistic (deontologising) rationalism. So, in other words Bhaskar argues that, despite his rejection of rationalism, Kant's empirical metaphysics is, as it were, an empirically circumscribed form of rationalism. But Bhaskar argues that this is impossible to sustain because, if we reduce metaphysics to the status of merely being a function of experience, then natural necessity is eliminated and with it the whole point in having a metaphysical domain at all. So with Kant's critique of pure reason we see his inability to either sustain an adequate concept of rationality or the intelligibility of Humean causal laws.<sup>10</sup>

By virtue of his insistence that empirical regularities are purely phenomena of closure Bhaskar can make the clear distinction (upon which the avoidance of the epistemic and ontic fallacies depend) between empirical identification and universal applicability:

At the level of transcendental realism, a distinction is drawn between the empirical identifiability and the universal (transfactual) applicability of laws; and the latter is seen to be a condition of possibility of the former. As the application of laws in open systems is justified, and presupposed by the intelligibility of experimental activity, the existence of an empirical regularity or a constant conjunction of events is not even necessary for the ascription of a law.  
(Bhaskar 1978: 164)

What Bhaskar is essentially doing here is founding a priori philosophical propositions about the object of scientific investigation in an a posteriori process that rejects an empiricist account of science. Because Kant's object-for-us is founded on empiricist notions about scientific knowledge acquisition, its metaphysical status is always going to be



restricted to providing philosophical explications of an a posteriori process that, by virtue of its reduction of universality to the artificial process of experimentation, in actual fact precludes any meaningful metaphysics at all. I conclude from this that the Kantian object-for-us is a failed bit of ontological idealism on Kant's part because, as we know, it is his attempt to mark out clear ontological foundations for empiricism, an endeavour that fails precisely because it is attempting to give ontological significance to something that is intrinsically resistant to a sustainable metaphysical theory of any kind.

### 3.4.3 *Bhaskar's transcendental realism as 'critical'*

We are thus left in the somewhat paradoxical position that, in exposing the lack of natural necessity and universality in empirical metaphysics, Bhaskarian TR is instrumental in classifying Kant as himself a transcendental realist. But this is only if we accept the latter's definition of the term. We saw in subsections 3.2.3 and 3.3.1 that for Kant the term transcendental realist referred to the fallacy of assuming that objects are simply given to us, thereby eliminating the difference between our representation of them and the way they are in themselves. But we saw in subsection 1.2.5 that Bhaskar prefers to use the term *empirical realist* to designate this type of thought. It refers to those philosophers who have used an empiricist account of experience as the starting point of their philosophical systems. And we also saw that this leads to epistemological absolutism – the tendency to dissolve ontology into epistemology. Bhaskar refers to a transcendental realist, on the other hand, as someone who can sustain natural necessity by positing depth realism. So Hume and Leibniz would be more empirical than transcendental realists for this reason. And Kant is an empirical realist because his philosophical system of synthetic a priori categories rests on the unique way in which he tries but ultimately fails to sustain natural necessity. Idealist metaphysical categories are deduced from an empiricistic assumption regarding the manifold of intuition.

Strictly speaking, a depth realist is more properly referred to as a *critical* transcendental realist. The distinction between Humean/Leibnizean and Bhaskarian TR depends on drawing our attention to this. It hinges on the prefixing of pre-critical and critical transcendentalism respectively to their philosophies. And so because Bhaskar's philosophy is prefixed by a critical transcendental epistemology he can construct a realism that takes heed of the immensely important Kantian point that we need to critically assess the conditions of possibility of knowledge. But critical realists can do this without having to dispense with the pre-critical idea that we can access the object-in-itself. Having redefined the terms of TR the Kantian definition is no longer useful. In spite of this clarification of terms I think it is best to stick with

Bhaskar's own definitions, not least because they lend themselves more to a CR analysis of these other philosophies. For this reason when I say 'transcendental realist' I continue to mean Bhaskar rather than Leibniz, Locke or Hume.

#### 3.4.4 *Kantian empirical metaphysics, ontological monovalence, detotalisation and deagentification*

I want to comment further on these actualist and subjectivistic errors from a DCR perspective. We have already seen in the last chapter how the irrealist error of actualism is given a dialectical logic by Bhaskar in *DPF* in the form of ontological monovalence, which itself stems directly from the failure to sustain an adequate concept of absence. The final task of this chapter is to elaborate somewhat on what we have seen as Kantian deontologisation by looking at precisely why, from a DCR perspective, Kantian a priori synthetic entities turn out to be so deontologising. This is important groundwork for the next chapter in which I will suggest that Hegel formulates a very important critique of the object-for-us from a dialectical perspective (but we will see that he is ultimately unable to progress beyond Kant). This groundwork will involve studying the relation between the idealist synthetic a priori and ontological monovalence. Essentially, our DCR critique will augment Kant's 1M errors that we have just considered with his failure to acknowledge the dialectical fluidity that the subject matter of the sciences must involve.

Kant's failure to sustain natural necessity is, as we know from subsection 2.3.1, described in DCR terms as 1M identity theory. And we know that this in turn leads to ontological monovalence at 2E and that this involves the 3L error of detotalisation – the split between emergent causal entities such as intentional human agency and unconscious praxis. We saw that the specifically Kantian version of this error was the dualistic disembodiment of agency from unconscious praxis. In other words, Kant draws a dichotomous contrast between subjective preferences and the determination of human actions as part of a natural order. And we know that this encourages, in Bhaskarian terms, a reification of the social world and hence the unhappy consciousness. This leads to problems at the fourth level of Bhaskar's DCR system – the *fourth dimension* (4D) – where transformative conscious praxis is denied and should be seen as the consequence for agency of the synthesis of empiricism and rationalism by Kant. In other words, Bhaskar thinks that the reason why Kantian social and moral philosophy involves the unhappy consciousness is precisely because of the object-for-us. The middle course that we have seen Kant plot in the philosophy of science between empiricism and rationalism whereby an account of the subject matter of science as conforming to Humean empirical regularities is

combined with rationalistic notions of a priori philosophical truths finds its expression in Kantian philosophy of the social sciences too. As it turns out, Kant formulates an anti-naturalist social philosophy. In the social world structural determinants become mere epiphenomena of human cognitive psychology in accordance with the hermeneutical principles that I introduced in subsection 1.3.2.

Let us look at this in more detail. In *PN* Bhaskar talks about the Kantian *language stratum theory* (Bhaskar 1998: 86), which is based on the distinction between the reasons agents may have in acting and causal explanations of their actions. Now we have just seen how the object-for-us is formed by Kant on the basis of the necessity of Humean causation. But the language stratum theory essentially involves the assertion that the rationality of reason explanations can be rescued from Humean causation by claiming that they take place at a different 'logical level' (Bhaskar 1998: 86) from talk about the causes of natural events – hence the hermeneutical split – a move which has, according to Bhaskar, a 'distinctly Kantian air' (Bhaskar 1998: 86). In other words, the social world is not constituted by objects-for-us and so is not subject to the laws of empirical metaphysics. We saw in subsection 1.3.2 that this sort of anti-naturalism was the hermeneutical response to the empiricist/positivist contention that reasoned explanations have no place in a world governed by empirical material regularities and that this response was necessary given their concession to Humeanism that the material world is governed by such regularities. Applied to the social sciences this takes the form of a mind-body split. Reasoned explanations are lifted, as it were, to a different logical level away from the physical world and thereby are not subject to proper scientific explanation (Bhaskar 1998: 88–9). According to these criteria a scientific understanding of human social activity will involve physicalistic reductionism. When talking about Kantian 'science' we of course mean Humean constant conjunctions, and so we have the reduction of the social object to the status of a mere epiphenomenon of structural processes. But language stratum theory rescues the social object from reductionism and so posits what Bhaskar calls 'spiritualistic' (Bhaskar 1993a: 198) dualism that involves the 'disembodiment' of human agents in relation to their transformative powers. We therefore have arrived at Kant's social ontology, which Bhaskar describes as having an 'immensely influential' (Bhaskar 1994: 4) impact on approaches to the philosophy of the social sciences over the last hundred or so years in that 'it continues to underpin . . . positivistic hypernaturalism (especially of a reductionist bent) and anti-naturalistic hyper-hermeneutics or discourse theory' (Bhaskar 1994: 4).

In *RR* Bhaskar points out that with Kantian anti-naturalism there is an inability to solve problems of antinomy:

What prevents an adequate resolution of antinomy for Kant is his empirical realism, his thoroughgoing actualism and determinism . . . to which he is wedded in his account of the phenomenal realm. For it is this which necessitates placing 'free man' in a realm, albeit one said to be possibly real (as distinct from merely apparent), outside and beyond the purchase of science. It is the ontology implicit in Kant's account of science, as manifest in his comprehensive actualism, that prevents him from situating an adequate account of human causal agency, and *a fortiori* of freedom as a possible property or power of embodied agents in space and time.

(Bhaskar 1993b: 164)

In short, reasoned explanations cannot have an ontological status because they do not have the character of empirical regularity. And so, according to Kant's own criteria, they must be noumenological. Any attempt to conceptualise the social object in scientific terms would be therefore committing the transcendental illusion. But we know from the last chapter that, by divesting reasoned explanations of their causal efficacy, mediated totalities at 3L will be *detotalised* leading to a split social world, expressed in Kantian terms as the phenomena–noumena dichotomy – the split between physicalistic reductionism and dualistic disembodiment.<sup>11</sup> This, Bhaskar comments, 'has . . . one enormous defect: it makes embodied intentional causal agency impossible' (Bhaskar 1994: 4).

Noumenally, however free we conceive ourselves to be, we are in fact unable (as far as we can know) to affect the course of events that would otherwise have prevailed. And with this, morality and the attribution of responsibility, scientific experimentation . . . and day-to-day life alike become impossible . . . The shipwreck of a theory.

(Bhaskar 1994: 4)

The ultimate explanation for this dichotomy lies, I want to suggest, in Kant's approach to the Platonic–Aristotelian fault-line, introduced in subsection 2.3.1. Empirical metaphysics involved the contention that Aristotle could not immanentise Platonic forms because induction was still tied to the Platonic rationalistic fallacy of thinking that knowledge of infinite transcendent reality was possible via philosophical speculation. Rather, the Aristotelian project of making knowledge of the material world possible could be achieved only if metaphysics was divested of its transcendent character and made to inhere in experience. It is in this way that we should understand Kantianism as a *deontologising rationalism*. Kant divests Platonic stoicism of its transcendent metaphysics

and replaces it with an epistemology of immanent metaphysics but of *experience* rather than of Aristotelian *forms* thereby making metaphysics consistent with induction. This is thus where antinomial problems in the Kantian system are at their sharpest – the resolution of the issue of how thought is to relate to the experience of the material world by positing the object-in-itself which separates the world into rational and irrational halves. According to DCR this leads to deagentification at 4D whereby the absence or ‘omission’ of crucial categories of (1M) transfactuality and real non-being (determinate absences) at 2E have their greatest impact on social science in the absence of determinate transformative agency at 4D. This is the domain where Bhaskar criticises Kant’s omission of these issues that, as we have seen, are central to the avoidance of the unhappy consciousness and deagentification. This is Bhaskar’s *omissive critique* of Kantian social theory. Kant’s approach to antinomial problems has led to the unhappy consciousness and crucial 4D omissions (Bhaskar 1994: 6).

### 3.5 Conclusion

In this chapter we have looked closely at how Kantian empirical metaphysics must be seen as a hugely significant form of irrationalism that is important to CR in two ways. First, the synthetic a priori character of the object-for-us provides essential methodological foundations for the Bhaskarian real a priori object-in-itself. Second, we have seen how in CPR Kant restricts the remit of apriorism to the subject matter of science, which in the next chapter I refer to as *weak* apriorism. Nevertheless, because Kantianism remains ensnared within Humean empiricism it cannot escape epistemic and ontic subject–object identity errors. In the next chapter we will see how important dialectical philosophy is to the avoidance of this trap. In particular we will examine how Hegel manages to avoid a subject–object identity within the parameters of science via his absolute idealism. The unfortunate thing for Hegel, as we shall see, is that he manages this only by constructing what is known as *strong* a priori philosophy. As we will see, the skilful avoidance of Kantian Humean errors is accomplished only within the parameters of a system that commits subject–object identity by rejecting weak apriorism itself. The importance of this dialogue between Kant and Hegel cannot be understated because in Chapter 5 I will argue that with Marxian dialectical materialism we get the combination of the most workable methodological principles of empirical metaphysics and absolute idealism.

# 4 Hegel

## 4.1 Introduction

### 4.1.1 General introduction

We have seen in previous chapters how philosophers have been motivated to resolve the antinomial problem of how the relationship between subject and object was to be accounted for and that this hinged on the extent to which the tension between the categories of necessity/universality and the immediate objects of sense experience could be relieved. We know that Plato, and to a lesser extent Aristotle, divested sense experience of ontological significance, whereas Hume undertook the reverse strategy, and that Leibniz sought to incorporate empirical science into a rationalist natural theology. Kant's preferred anti-empiricist and anti-rationalist solution was to define necessity and universality as categories belonging to the objects of sense experience and this enabled him to posit the object-for-us. In this chapter we will look at Hegel's attempted resolution of this problem.

In his important works the *Phenomenology of Spirit* (PS; 1807), the *Philosophy of Subjective Spirit* (PSS; 1817) and the *Philosophy of Mind* (PM; 1817), Hegel looked upon all these solutions as stages in the development of what he called *spirit*.<sup>1</sup> In its original or a priori form it refers to the absolute unity of thought and matter in thought, which Hegel refers to as the *soul*. This is spirit's natural state, a state of absolute knowing. But the soul expresses itself from within the corporeality of the physical body of sensations and emotions in which it exists. This is a limitation on soul that it expresses by positing its corporeality as something external to it or, as Hegel argues, it 'separates itself from its immediate being and places this over against itself as a corporeity incapable of resisting its formativeness' (Hegel 1978b: §412, 425). This separation represents the transition to consciousness. To be conscious of something immediately suggests a distinction between the knower and what it is that is known, and so consciousness involves a *bipolarity*

(Taylor 1975: 135). The condition of possibility of knowing anything is to posit what is known as something external (Hegel 1978c: §413A, 5). Thus, by positing itself as consciousness and nature as external to it, spirit considers itself as a *subject* and nature as an *object* (Stone 2000: 730; 2005: 34). And so we are to understand the externality to be merely an act of spirit. Hegel, it seems, does not think that the thought–matter distinction has any literal truth (Stone 2005: 34).

The dynamics of this process are governed by the principles of purely logical and a priori thinking. These are Hegel's *logical categories*. His discussion of them is divided into three main aspects corresponding to the concerns of his major works. The first concerns the *PS* in which he discusses the application of the categories to human experience. His discussion of these categories anticipates the more thoroughgoing discussion of them in their purely abstract form, undertaken in the *Science of Logic* (*SL*; 1812) and the *Encyclopaedia of the Philosophical Sciences* (*EL*; 1816). Finally, we have the application of the categories to the natural world undertaken in the *Philosophy of Nature* (*PON*; 1817). This division of Hegel's discussion is important to any possible DCR critique of his system – and for a very simple reason. First, human sensuous consciousness exemplifies the categories in a fairly straightforward way so we have a correspondence between apriorism and the realm of human experience. Second, there is a similar exemplification of the categories in nature. This in itself is not a problem for DCR. Problems arise because Hegel happens to embrace a very empiricistic view of nature. And so the logical categories are given empirical expression in the natural (i.e. empirical) categories that govern the natural world. The spectre of the epistemic fallacy will rear its head in this chapter just as it did in the last.

Already the similarities and differences between Kant and Hegel are obvious. Like Hegel, Kant begins with a priori contentions about consciousness and its constitution that is the condition of possibility of experience.<sup>2</sup> And so, like Kant, Hegel should be understood as a *critical* philosopher. We will see below that Hegel praises Kant's thinking here, and particularly the transcendental unity of apperception – the original unity of the categories and concepts in the mind. Hegel would concur with Kant's criticism of the empiricists that the structure of the subject matter of our experiences lies within the a priori structures of the human mind and that to posit them as self-subsistent properties of the objects themselves is an erroneous act of externalising the mind from itself. But we will also see important differences between Kant and Hegel as well. In subsection 3.2.2 we classified Kant as a transcendental *idealist*. We saw that the whole coherence of his Copernican Revolution lay in the ontological contention that the objects of cognition must be, by their very nature, objects of sense experience – there is something about the subject matter of experience that makes Kantian critical transcendentalism hold.<sup>3</sup> That is, although there was no necessary connection



between this epistemological theory and ontology there was, nevertheless, a logical one – Kantian epistemology implicitly contained the positing of the object-for-us, the condition of possibility of which was, in turn, the object-in-itself. This, as we know, was the explanation for Kant's *empirical metaphysics*. We will see in this chapter that Hegel's ontological commitment is much more transparent in that his account of human knowledge development via sense experience in the *PS*, *PSS* and *PM* bears striking similarities to the development of nature in the *PON* precisely because they all exemplify the empirical exemplification of the logical categories. But, unlike Kant, Hegel presents us with *realism* even though his philosophy is more often described as *absolute idealist*.

Let me explain. Kant grounds his empirical ontology of the object-for-us in a wider notion of a universe of self-subsistent atomistic elements, which in their naked form must remain mysteries forever. As we have seen in the last chapter there is a type of externality that the Kantian consciousness must deal with that is a priori. On the other hand, as we will see, Hegel thinks that the externality from what Kant has called the noumenological object is also merely an act constitutive of an active experiencing spirit. In other words, Hegel thinks that what Kant classified as an unknowable 'out there' is just another example of precisely the sort of empiricist delusion that Kant himself had scolded the likes of Hume about. Hegel wants to extend the implicit unity of thought and matter of the ontologically idealist object-for-us to include the object-in-itself, thereby transforming the latter into something knowable. He wants to extend the methodology of the object-for-us that led Kant to ontological idealism to cover the object-in-itself. As we will see, Hegel thinks that Kantian idealist methodology can be developed into realism.

This creates an interesting paradox for Hegel because his philosophy is sometimes called *absolute idealism*. But the absolute idea for Hegel is an ontological and structured reality that is not merely a function of human thought. So when Hegel talks about idealism he is not referring to idealism in the sense that Kant meant it (i.e. as a reality-for-us, as it were, that is a product and condition of possibility of our experiencing activities) but as something ideal that exists externally to these conditions of possibility of experience. In this sense Hegelian idealism actually is a form of realism.

This should make sense given that we already know Hegel's understanding of what the material world is made up of (i.e. it is an empirical exemplification of a priori logical categories of spirit's act of self-externalisation). Much of our discussion in this chapter will focus on his philosophy of nature and the realism it involved because it is a text that reveals valuable insights into his philosophy of science. Such an interpretation of Hegel's method in *PON* is not, of course, universally accepted. I will refer to (and criticise along DCR lines) alternative

*weak* a priori methods advanced respectively by Gerd Buchdahl (1993) and John Burbidge (1996).<sup>4</sup> The *strong* a priori thesis that I think most closely captures Hegel's intention is articulated forcibly by Alison Stone (2000; 2005). In the end, I think that none of these interpretations convincingly demonstrates how Hegel's absolute idealism contains a cogent theory of necessity and universality. I will suggest that all three lead Hegel inexorably to empirical realism.

The distinction between weak and strong forms of apriorism is important because the implication of Hegel's self-confessed realism is that we must categorise him as an a priori metaphysician in a much stronger sense than Kant. For Kant, as we know, apriorism is necessarily synthetic, thereby restricting philosophers to the deduction of a priori concepts from the results of empirical science (i.e. a posteriori). We saw in the last chapter that this created a whole host of problems for Kant. We will see in this chapter that Hegel has much to contribute to the formation of a sustainable (i.e. non-empirical) form of realism by his critique of Kant's attempt to develop cogent a priori concepts from within the confines of empirical metaphysics.

As far as epistemology is concerned, Hegel sets the scene for the dialectic of knowledge development through various philosophical systems in humankind's inexorable quest for final truths about the universe and how knowledge of it is possible. He thinks, moreover, that the reason why consciousness always seems to be engaged in a struggle between two categories – subject and object – is its failure to think dialectically. That is, it cannot recognise the internal struggle within spirit because to do so would involve acknowledging what caused the struggle in the first place – the banishment of matter from itself. If it did (and Hegel thinks that it eventually does) then the tension would become resolved once and for all (Stern 2002: 23) and antinomian problems solved. And we will see that a very similar process occurs in the domain of nature itself. The struggle of epistemology is defined as the *dialectic of human consciousness* and that of ontology as the *dialectic of matter* (Colletti 1979: 14), and so it is necessary to introduce both theories prior to a more substantive investigation of them in later sections.

#### 4.1.2 *The dialectic of human consciousness and the dialectic of matter*

Hegel thinks that the failure of philosophers to adequately resolve antinomy lies in either their failure to recognise that our understanding of the world is governed by a dialectical process at all or their failure to grasp the process adequately. Plato – the original dialectician – falls into the latter category because his stoicism was premised on the effective dissolution of one side of the dialectic as having anything significant to contribute to philosophy – sense experience.

Nevertheless, it is true to say that Hegel belongs to the Platonic tradition. As a purely finite self, the object is mere matter-in-itself (in nature) and material appearance (in human consciousness). At this level its being is purely negative and by virtue of this it has no truth or reality as a metaphysical self. In other words, Hegel affirms the Platonic definition of matter as having no 'veritable being' (Hegel 1969: 155). But Hegel differs from Plato by insisting that the infinite is not a one-sided substance that has the finite outside itself (Colletti 1973: 17). As he says in the *SL* 'the infinite does not stand as something finished and complete above or superior to the finite, as if the finite had an enduring being apart from or subordinate to the infinite' (Hegel 1969: 138). The finite is thus intrinsically related to its opposite – the positive, infinite and ideal – rather than it being, as Plato thought, disconnected from it. This is because Hegel thinks that its negative being is the negation of *its own* positive being and so the infinite cannot be understood as having its own one-sided being. Rather, it is the unity of opposites within itself (being and non-being, quantity and quality, finite and infinite). This makes sense given Hegel's insistence that any externality of (finite) matter from (infinite) mind is a conscious act of spirit setting up logical oppositions within itself.

Human and natural history is therefore defined in terms of a struggle for appearances (to human consciousness) and matter (nature) to regain their positive being in absolute thought. But the intrinsic relation means that just as the finite is the illusory being of the infinite, so the infinite is the positive manifestation of the finite (Colletti 1979: 18). Thus, non-being is not the same as nothingness, or, as Hegel puts it, 'illusory being is not *nothing*, but is a reflection, a *relation* to the absolute' (Hegel 1969: 532). In essence, the object is therefore a *logical unity of opposites* – the object of appearance/matter-in-itself and its universal side in the absolute. And it is this unity as being and non-being that is the ground of unity and universality. And so we can see precisely how, as I described in subsection 4.1.1, the necessary condition of possibility of human consciousness/the infinite idea, and the conceptions of universality and infinity that they contain, is their exclusion from the individual, material and finite.

#### 4.1.3 *Hegel's endorsement of the Kantian doctrine of unifying speculative synthesis*

Now it should be obvious from the previous chapter that not only does dialectical thinking not play a part in the Kantian consciousness but it is something that, according to Kant, is deeply capricious to our appreciation of the logical categories of thought. Hegel thinks that this is an unfortunate position for him to take, not least because he is sure that there is much of value to be found in the role of the Kantian categories

in constructing the object, not least the transcendental unity of apperception, as we saw in subsection 4.1.1. In other words, Kantian philosophy contains, in the Hegelian analysis of it at least, the essential ingredients for consciousness to apprehend the dialectic of matter, but it is a potential that is not realised in Kant's empirical metaphysical application of several important principles that he develops.

In the last chapter we saw that for Kant the objects given to us in experience were compounded from a plurality of intuitions brought together by the activity of the synthesising transcendental subject.<sup>5</sup> That the unifying subject was synthetic meant that the categories and concepts were intrinsically connected to intuition. As we saw, synthesis is nothing more than the attempt to impose a synthetic unity on to empirical intuitions (the manifold of impressions that is raw sense data).<sup>6</sup> In other words, the object can be broken down into its elemental properties at the level of sensible intuition (although Kant thought that this reduced the object to a chaotic jumble of impressions). It is made up of 'ontologically self-subsistent elements which can exist outside and prior to their instantiation in the whole' (Stern 1996: 77). This is Kant's synthetic ontology of the transcendental object containing intuitive properties over and above (transcending) its atomistic ones. And so we have the object-*for-us*<sup>7</sup> and critical transcendental idealism.

Hegel concurred with the basic Kantian contention that in order to understand what it experiences the consciousness requires that an original unity must be given to the flux of the senses, i.e. the external world must be idealised (Hegel 1892: §42, 88–89). Kant was correct, he tells us, to posit categories of universality and necessity in the transcendental ego. It is here and here alone that these categories are possible because the world of immediate sense experience necessarily cannot be the realm in which they can inhere:

Kant therefore holds that the categories have their source in the 'Ego' and that the 'Ego' consequently supplies the characteristics of universality and necessity . . . The world of sense is a world of mutual exclusion: its being is outside itself. That is the fundamental feature of the sensible. 'Now' has no meaning except in reference to a before and a hereafter. Red, in the same way, only subsists by being opposed to yellow and blue. Now this other thing is outside the sensible; which latter is, only in so far as it is not the other, and only in so far as that other is. But thought, or the 'Ego', occupies a position the very reverse of the sensible, with its mutual exclusions, and its being outside itself. The 'I' is the primary identity – at one with itself and all at home in itself. The word 'I' expresses the mere act of bringing-to-bear-upon-itself: and whatever is placed in this unit or focus, is affected by it and transformed into it . . . This is the process which Kant calls pure apperception in distinction

from the common apperception, to which the plurality it receives is a plurality still; whereas pure apperception is rather an act which the 'I' makes the materials 'mine'.

(Hegel 1892: §42, 88)

Indeed, as we saw in subsection 3.3.4, Kant thought that empirical synthesis presupposed pure synthesis (the unity of apperception). Now, in accordance with rationalism's criteria,<sup>8</sup> and by Kant's own admission,<sup>9</sup> the latter form of synthesis performed an *analytical* function. We saw that this was discussed in depth by Kant in the 'Analytic' section of the *CPR*, in which he argued that it was the transcendental unity of apperception that established the conditions of possibility of experience rather than those conditions belonging to raw sense data themselves, as was implied in Humean thought. Apperception thus provided us with essential logical categories such as cause and effect. In the *EL* Hegel approves of this idea when he says that 'The tendency of all man's endeavours is to understand the world, to appropriate and subdue it to himself: and to this end the positive reality of the world must be as it were crushed and pounded, in other words, idealised.' (Hegel 1892: §42, 88). And in *Faith and Knowledge* (*FK*; 1802) Hegel latched on to this point to demonstrate that Kant had put his finger on something important: that synthesis is essentially the product of *purely speculative* thought; the manifold of intuition is provided by this original function of the mind (Hegel 1977a: 71; Priest 1992: 6). In the *SL* Hegel comments that:

Kant has introduced ... the extremely important thought that there are synthetic judgements *a priori*. This original synthesis of apperception is one of the most profound principles for speculative development; it contains the beginning of a true apprehension of the nature of the Notion and is completely opposed to that empty identity or abstract universality which is not within itself a synthesis.

(Hegel 1969: 589)

Hegel is essentially endorsing Kant's twofold conception of how we gain knowledge – the mind has limiting conditions imposed on it by the material world but the latter is at the same time the product of the former. In short, Kant identifies that the condition of possibility of metaphysics is the unity of apperception as much as it is the condition of possibility of thought that there is a concrete material world that causes us to have experiences (Colletti 1973: 117). Metaphysics is therefore the result of, on the one hand, an original natural process whereby matter causes the mind to conceptualise it and, on the other, a logical process whereby thought itself is determinate of reality. So

far, Hegel is completely on board. Where he begins to depart from the Kantian position is concerning the theory about how this world of matter came to be.

#### 4.1.4 *Hegel's rejection of Kant's definition of the object as an atomistic plurality of self-subsistent elements*

We saw in the last chapter that Kant's object-for-us was only possible on the basis of precisely the sort of twofold process we are talking about here. On the one hand, we have the idea that thought (the transcendental unity of apperception) is determinate of the world of sensuousness that the mind experiences, leading to the creation of the object-for-us. There is an intrinsic unity created in this domain between object and subject and so what is concrete is determined by consciousness. But in subsection 3.3.5 we saw that the Copernican Revolution and the objects-for-us were only possible on the basis of a posited world of objects-in-themselves that is the ever-present condition of their possibility and is forever an unknowable 'out there'. We saw that this was the crucial concept of negative noumena upon which the whole empirical metaphysical project depends. In other words, Kant was careful to point out to us that the concrete totality achieved in human thought was just one side of the whole picture, and the other side (objects-in-themselves/noumena) was its condition of possibility. So we have a twofold process – a logical process whereby thought is determinate of the concrete object in the sense that it is contained within thought and a process of mind-independent reality in which the object-in-itself resides that is the condition of possibility of the former (what we saw in subsection 4.1.1 and in the last chapter was Kant's idealist positing of the object-for-us and realist positing of the object-in-itself).

Hegel accepts that there is a dual process but contends that the material object-in-itself is connected to the logical process in a much more important way than just being its condition of possibility. This should make perfect sense to us given our understanding of the dialectic of matter – the bifurcated world contains its implicit unity *in thought*. There is therefore an intrinsic relation between logic and the external world of matter that is governed by the dialectic. So Hegel thinks that the Kantian transcendental consciousness begins with a world of atomistic flux in accordance with our purely sensible experience and so with a world that can be divested of our imposed synthetic unity, leaving it exposed as Kant thinks that it really is – a world of *independent* sensible properties. The world that Hegel sees is rather different – it is a world of *intrinsic* and *primary* unity and so is *irreducible* (Stern 1996: 42, 75). He tells us in the *SL* that the unity in the Kantian transcendental consciousness of the object achieved by the synthesis is an external one:



The very expression *synthesis* easily recalls the conception of an *external* unity and a mere combination of entities that are *intrinsically separate*. Then, again, the Kantian philosophy has not got beyond the psychological reflex of the Notion and has reverted once more to the assertion that the Notion is permanently conditioned by a manifold of intuition. It has declared intellectual cognition and experience to be a phenomenal content, not because the categories themselves are only finite but, on the ground of a psychological idealism, because they are *merely* determinations originating in self-consciousness.

(Hegel 1969: 589)

It follows that because, as we have seen, Kant grounds apperception (the Notion) in a world of ontologically self-subsistent atomistic elements, the transcendental consciousness considered apart from the manifold of intuition is 'declared to be empty and devoid of content' (Hegel 1969: 589) or, as Kant himself describes it in the *CPR*, 'the mere effect of the imagination, of a blind though indispensable function of the soul' (Kant 1998: B103/A78, 211). But Hegel is not convinced that the notion of apperception sits comfortably with Kant's insistence that the a priori is synthetic. He argues that if we reject Kant's pluralistic (realist) ontology, then the move to supplement external finite matter by the transcendental subject is not necessary (Stern 1996: 38–9). Indeed, Hegel thinks that Kantian apperception does not actually need to take this additional step because it 'contain(s) determinateness and difference within itself' (Hegel 1969: 589), i.e. it is the ground of an original primary ontological unity of thought and matter, as we have seen. He continues 'since the determinateness is that of the Notion and therefore *absolute determinateness, individuality*, the Notion is the ground and source of all finite determinateness and manifoldness' (Hegel 1969: 589). In other words, the Notion contains within itself the character, as it were, of the finite world. The individual 'This', 'Here', 'Now' is the exemplification of the universal (Stern 1996: 60). What Hegel's thinking here comes down to is a conception of the object as a *substance universal*.

#### 4.1.5 *Hegel's definition of the object as a substance universal*

Hegel preferred to think of the object as an immanent irreducible unity. What this essentially means is that the world of sense is not made up of objects that are intrinsically atomistic requiring us (or any other experiencing subject) to impose a synthetic structure upon them; rather they have their own unity. And so it follows that the idealised metaphysical unity of the object cannot be reduced to the search for basic



intuitive properties of some constituting experiencing subject. Hegel was sure that there was a knowable and intrinsically unified material and sensuous object free from any activity of synthesis on the part of a Kantian transcendental subject (Stern 1996: 38).

The difference between Kant and Hegel's idealised object can be expressed as that between the predicate as a collection of accidental *sensible properties* and as a sensuous exemplification of a *substance universal*. The former belongs to empirical metaphysics in that the universal properties identified in a particular material object are the concepts that the experiencing mind uses to classify individuals and subsume them under general terms (Hegel 1969: 645; Stern 1996: 64). They are therefore accidental qualities of the individual object. The latter belongs to Hegelian (realist) absolute idealism in that predicates form part of the essential nature of individuals that they exemplify. Perhaps the easiest way to understand this approach is to look upon material objects as containing within themselves universals and unity in an unconscious form (Findlay 1958: 41). Hegel refers to this in the *PON* when he says that '[n]ature is, however, only implicitly the Idea . . . a petrified intelligence . . . a frozen intelligence' (Hegel 1970a: §247, 14–15). In their unconscious state, objects exist merely as finite and quantitative particularities. That is, they exist as mere matter and sensuous individualities. If in its unconscious form the object is a mere individuality, then any act of conceptualising it will necessarily involve an act of *unity* and *universality*. But it involves no *imposition* upon them but rather *awakening* within them of what they implicitly are (Findlay 1958: 45). It is obvious why this should be the case for Hegel, considering what we know of the dialectical relation between thought and matter – we have an original totality and unity in thought that is destroyed when thought externalises matter, thereby creating the logical categories leading to an eventual thought–matter unity in absolute spirit.

As I have already indicated, the *PON* is an important text in Hegel's philosophy of science. I want to undertake a more detailed look at this much neglected and misunderstood piece of work because we get extremely valuable insights into how the a priori rational forms that he formulates in the *EL*, *SL* and *PM* are given application to the material natural world. I will focus on Alison Stone's thesis that in the *PON* we see evidence of an underlying rationalistic phenomenological realism at work in Hegelian philosophy. Although I agree with her that this is the most reasonable interpretation of Hegel's philosophy of science, I contend that it is not actually a form of realism at all but rather a form of subjectivism hamstrung by its inability to maintain the crucial distinction between subject and object. I argue that Hegel's phenomenological apriorism is motivated by a misconception of science as irreducibly empiricistic in metaphysical outlook and that it is perfectly possible to construct a realist apriorism without having to

distance philosophy from science to the extent he suggests. I also contend that such an alternative realist apriorism can provide an account of development and change in the world without recourse to what I will argue is a profoundly *irrealist* teleological idealism at the heart of Hegelian phenomenology. To this end I draw on the dialectical work of Bhaskar and, in particular, his development of an anti-empiricistic form of ontological realism which is much more cogent than Hegel's version. But this does not mean that Bhaskar himself is above reproach because I will also contend that his ontological realism depends for its sustainability on harnessing it explicitly to *materialist* ontology. The fact that Bhaskar, together with other eminent critical realists (in particular Margaret Archer, Andrew Collier and Douglas Porpora), not only fails to do this but actively engages in flirtations with theistic metaphysics (what is known as the 'spiritual' turn in CR) means that, in their hands, the workable ontological realism Bhaskar has himself formulated is at risk from precisely the damning criticisms he levels at the Hegelian version.

In the *PON*, according to Stone's thesis, Hegel is primarily interested in distinguishing between the philosophical theories that inform the scientific interrogation of nature (scientific metaphysics) and a decidedly non-empirical rationalist philosophical theory with its own concomitant account of the natural world. The distinction is predicated on Hegel's conviction that the objects of the natural world contain intrinsic rationality. The problem, as he sees it, is that he can deduce from the fact that scientific procedure involves experimental observation that its attendant metaphysical picture of the world is one of bare, contingent and static material objects, thereby missing nature's so-called intrinsic rationality. As Stone demonstrates (Stone 2005: 86), this does not mean that Hegel is denigrating science because using its empirical methodology does yield important information about really existing objects and forms. But it misses an important sense in which these real objects have a rational aspect to them that is central to how we understand their emergence and development. For this we need an a priori philosophical account of the natural world that looks to an objective rationality that is said to pervade it. The reason why Hegel is so sure of the existence of this rationality in nature is because he thinks that it is an implicit element (and by this I mean underdeveloped or unconscious) of our basic sense experience. Stone refers to this idea as Hegel's *phenomenological* argument (Stone 2005: 107) and she is convinced that it allows him to apply his absolute idealist system to the domain of natural ontology and epistemology.

In the sections that follow I will examine her arguments in favour of this interpretation of Hegel's intent in the *PON*. I conclude that I believe her reading of Hegel here is extremely useful in helping us break through what is a rather opaque piece of work in order to identify

important philosophical themes and principles at work within its pages – in particular, the idea that Hegel develops a phenomenological account of nature, which strongly connects the *PON* with the principles and themes of his more famous works such as the *PSS*, the *SL*, the *PS*, the *EL* and the *PM*. However, I wish to contest a number of key assumptions that Stone has eloquently demonstrated are at work in Hegel's phenomenology. In particular, I want to take issue with his assumption that scientific metaphysics is necessarily committed to an empiricist account of the natural world that his rationalist phenomenological apriorism presupposes.

## 4.2 Hegel's view of nature as rational

### 4.2.1 *Hegel's notion of reality, the concept, the idea and the absolute idea*

As I have just indicated, Hegel's phenomenological approach to the philosophy of nature presupposes that we should have good reason to think of the natural world as governed by intrinsic rationality. And that reason is provided by the fact that at the moment of our basic sense experience we can capture something about nature that empirical science cannot – an objective intrinsic rationality. Before we look in some detail at what Hegel obviously thinks is the important contribution sensibility makes to our understanding of the natural world, I want to briefly clarify this Hegelian notion of an identifiable intrinsic rationality.

In the *SL* Hegel refers to the Idea as 'the unity of the concept and reality' (Hegel 1969: 806) and Stone calls it 'rationality that manifests itself comprehensively within ontological structures' (Stone 2005: 99). This implies a distinction between the concept and reality (i.e. the bipolarity), which is only overcome when the former pervades the latter. An example of this distinction is my intention to go to the shop (concept) that is given expression in physical reality when I put my plan into action. It follows from this that a reasonable interpretation of the Idea is that it is the *objectification* or *realisation* of the concept (McCarney 2000: 52). Joseph McCarney, in his study of Hegel's philosophy of history, makes the astute observation that if this interpretation holds we can identify an immanent rationalistic dynamic of change. He argues that

if it [the concept] is the unrealised Idea, it is natural to think of it as inherently restless and dynamic, ever striving to fulfil itself in reality . . . It introduces the element of inner-directed self-movement into a static universe. The metaphysical vision of idealism is then one of a cosmic process of becoming.

(McCarney 2000: 52–3)

Thus the concept is the subjective form of the Idea striving to manifest itself in material reality (i.e. give itself objective embodiment) and, as it progressively does so, it transforms itself *into* the Idea. In this way, the Idea should be understood as the moment when ontological structures begin exhibiting themselves as *forms of rational thought*. A fourth term is the *absolute idea*, which differs from the Idea in that it is thought that *thinks of itself* as the unity of concept and reality, as rationality pervading ontological structures, whereas the Idea is simply this unity of thought and matter itself.

#### 4.2.2 *Nature as rational: linear and non-linear interpretations of Hegel's method*

Now, it seems on first appearance that there is little need for a philosophy of nature as such because the movement of the logical categories as described in the *SL* and *EL* appears to involve positing nature (non-conceptual matter) as an intrinsic part of the absolute idea. But on closer examination this is, in fact, not the case. The key here is the importance of the *process towards* unification – the notion that spirit externalises matter from itself in order to become unified with it again. The Idea as conceptually pervaded matter cannot allow for any development; that is, it cannot allow for the very process that is its own condition of possibility. It is thus incumbent upon it to create a non-conceptual form of reality as the prerequisite to the realisation of itself as enmattered thought in the absolute idea. And so we have the definition of the beginning of nature as matter that is banished from rationality. As Hegel puts it in the *PM*, 'As Mind is free, its manifestation is to *set forth* Nature as *its* world; but because it is reflection, it . . . at the same time *presupposes* the world as a nature independently existing' (Hegel 1894: §384, 7).

The importance of viewing the logical categories in the *SL* and *EL* as fundamentally abstract cannot be underestimated, especially when we point out what appears to be, at first sight, Hegel's rather curious derivation of materiality from pre-existing rational ontological structures. Viewed in this way, it seems that Hegel has developed a dubious linear system which explains the transition from pure to enmattered logical forms. It is dubious because it leaves itself open to criticisms from, in particular, two contemporary critics of Hegel, Friedrich Wilhelm Joseph von Schelling (1775–1854) and Feuerbach. They argued that to derive nature as a requirement of logic is simply to explain what nature must be like *if* it existed and is completely impotent to explain the fact *that* nature *does* exist.<sup>10</sup> But if we interpret the logical forms as abstractions from their necessary instantiations in matter (and indeed, in the human mind in the case of the development of human knowledge), then the rather crude theory of natural development and evolution as



physical manifestations of essentially self-sustaining (i.e. non-material) ontological structures is avoided. On this basis, Hegel begins with already existing matter at various stages of its movement (i.e. from basic non-organic matter through to organic and sentient life forms) and extrapolates the successive conceptual forms which thus correspond to particular material instantiations (Stone 2005: 105).

The problem with this non-linear interpretation of Hegel's intent in the *PON* is that, even though it enables us to identify an a priori method at work in his system, it is not one according to which rational forms contain *explanatory primacy* in accounting for successive forms of materiality, which any defence of his view of nature as rational depends upon. That is, the problem for Hegel is that this reading of his philosophy is quite without any reason to accept the explanatory primacy of the logical categories. The linear account, for all its fatal deficiencies, at least involved positing nature as a necessary consequence of conceptual ontology. The more acceptable non-linear account, which operates from an already existent natural world, is at the expense of the explanatory power of Hegel's contention that nature is essentially rational. It is this fundamental weakness that Stone's phenomenological reading of the *PON* seeks to remedy.

### 4.3 Hegel's phenomenological philosophy of nature

#### 4.3.1 *Sense experience as protoconceptual*

According to Stone, Hegel's phenomenological understanding of nature begins with the contention that basic sense experience apprehends nature as composed of the interaction and flux of basic elements – earth, water, light and air – and that a philosophy of the natural world as rational is continuous with this basic acquaintance with nature (Stone 2005: 107–8). It is continuous because these elements are the empirical manifestation of rational forms. For this reason, it is important to view nature as pervaded with rationality, and it is the job of philosophy (aided by science) to extrapolate the rationality that is implicit in our sense experience but that we are unconscious of. It is important to note that this pre-conceptual period offers us a glimpse of an essentially pre-conscious thought that will be central to our understanding of the realist credentials of Hegelian phenomenological theory below. In lacking conceptuality, the mind cannot posit what is experienced as external to the experiencing subject and, consequently, cannot know itself *as* an experiencing subject. Concepts of 'subject' and 'object' have not yet arisen because the mind has no grasp of its 'otherness' from that which it experiences. The process towards our understanding of conceptuality begins with the emergence of sensuous

*consciousness* (Stone 2005: 37–40) as the first stage in an epistemic and cultural process through various forms of thought (of our externality from matter) until we arrive at a fully conceptually developed view of nature as enmattered rationality. As Stone argues, consciousness supersedes ‘the previous stage of the subject’s existence, in which the subject has assumed the form of the “soul” . . . a form of subjectivity that remains embroiled in the individual’s corporeality, sensations, and emotions’ (Stone 2005: 33). I take it that she means that the superseding is the moment when the soul abandons its protoconceptual condition and disintegrates into consciousness on a journey to reunification in absolute spirit.<sup>11</sup> The paradox here is, of course, that pre-conceptual sensuousness is the most primitive form of the mind and yet it indicates nature’s intrinsic rationality, which human beings can only understand when they have undergone the epistemic process of spirit. The *PON* offers a discussion of the pre-conscious state of the mind, which constitutes an essential *unity* with nature’s real inner rationality (i.e. a fundamental matter–thought identity), a unity that is broken at the moment of sensuous consciousness and reunified only after a long process of (necessary) exclusion and externality.

That Hegel posits that the condition of possibility of sense experience’s essentially intrinsic conceptuality is initially premised in elemental protoconceptual experience is of primary interest to us here. This basic contention about sense experience immediately distinguishes Hegel’s phenomenology from Humean empiricism which, as we saw in subsection 1.2.1, involves an implicit (and unacknowledged) theory of nature as consisting of empirical regularities. In other words, while Hegelian phenomenology extrapolates from sense experience an inchoate structure, Humean empiricism simply *derives* a structure of causal regularity. Hegel’s system is therefore explicitly *a priori* because, although he is endorsing Hume’s point that we must begin with sense experience, he argues that as it has a basic elementality to it, this provides us with a tantalising glimpse of *underlying* rationalistic structures at work in our apprehension of nature and of which the elements are the manifestation.

As we have seen, in this Hegel is positing a protoconceptual form of subjectivity (Stone 2005: 119), according to which we organise and pattern what we meet with our senses. And it is in terms of an elemental grasp of natural forms that we organise and pattern our sensibility. In a moment we will see that this view of basic sensibility in fact commits Hegel to a form of ontological realism (i.e. the rationality we apprehend in basic sensibility is actually reflective of a rationality that is intrinsic to nature *itself*) on account of the way our senses are constructed as emergent from (and hence continuous with) nature. But, for the moment, I think it would be useful to introduce an aspect

of Hegel's methodological system, what Stone calls the *strong* a priori method.<sup>12</sup> I mentioned above that phenomenological experience is the manifestation of a priori rational forms. It is now necessary to elaborate on this.

#### 4.3.2 *Strong apriorism*

According to Stone 'strong a priorism distinguishes between a basic, nonempirical, theory of nature and an overall vision of nature which results when that theory is – as it should be – fleshed out with empirical findings' (Stone 2005: 9). The success of this distinction hinges, Stone tells us, on Hegel 'describing nature in substantially different terms from empirical science' because he can then 'avoid presupposing in advance the compatibility of particular scientific claims' (Stone 2005: 57). We therefore have an a priori theory the basic structure of which is independent of the empirical but nevertheless seeks to 'incorporate scientific material whenever it corresponds to a priori claims' (Stone 2005: 9). Stone is aware of the possible implications of this relationship – that in 'fleshing out' a priori claims with empirical findings that turn out to be compatible with them, Hegel is committing the error of *epistemic absolutism*.<sup>13</sup> She thinks that this is not in fact applicable to Hegel because he does not *deduce* empirical findings from a priori concepts but rather merely incorporates the former into the latter on an *interpretative* and *provisional* basis (Stone 2005: 57). That is, objects that are identified empirically are incorporated into the philosophy of nature on the condition that they can be interpreted as the empirical expression of an a priori natural form. Stone therefore contends that, 'which empirical and philosophical properties are identical involves *interpretation*' (Stone 2005: 11). She uses the example of Hegel's a priori deduction of a body located at the centre of a structured system of bodies which contains a homogeneous type of matter manifested in those surrounding bodies. This phenomenon is then seen as identical to the empirically identified sun and its illumination of the planets (Hegel 1970b: §275, 13; Stone 2005: 10–11). In this way, Stone demonstrates how Hegel deduces in a priori terms that which have *quite independently* been identified in science and described in quite different – empirical – terms. And so although there may be deduction at work in Hegel's a priori theory of nature, that is where it ends – empirical findings are, rather, contingent.

Now, the seemingly obvious dependence of the sensuous elements on this sort of interpretative correspondence to a priori forms on first appearance seems to contradict Hegel's phenomenological view of them as intrinsic and necessary aspects of sense experience. That is, we have just seen that scientifically identified empirical forms have a



contingent status within the Hegelian aprioristic theory of nature. The elements are empirical forms too, albeit not dependent for their apprehension on science, and so surely, by Hegel's own logic, they too must have a contingent status? If so, then they can hardly be said to be necessary but rather *contingent* (Stone 2005: 127). Thus, the empirical forms, earth, water, light and air cannot be *elemental*. Stone thinks that this does not, in fact, apply because there is a marked difference between the necessarily invariant experience of the elements and other empirical forms. The contingency of empirical forms that is involved in strong apriorism in fact applies only to scientifically identified and conceptualised forms which are subject to continual amendment and even radical transformation. The elements, by contrast, belong to the domain of basic sense awareness rather than empirical science as such<sup>14</sup> and are invariant features of the way in which we experience anything (Stone 2005: 127). Thus, if it is true that the forms that are specifically identified by empirical science are contingent, the invariance of elemental forms renders them necessary.

In fact, it seems that this distinction between empirical science and basic sense awareness suggests a crucial interconnection between the phenomenological method and the wider strong a priori theory. Although Stone does not make this point it seems to me that it is the necessary character of specifically elemental experience that connects Hegel's phenomenological theory to his strong apriorism. To be more precise, our basic sense experience as elemental necessarily acquaints us with rationalistic patterns of behaviour of material forms, an acquaintance that represents the manifestation of the same rationalistic categories that Hegel has identified a priori. This also helps us to see how Hegel thinks that he can avoid epistemic absolutism because while there is a clear link between elemental experience and apriorism no such necessary connection exists between the latter and those forms identified by empirical science – elemental experience and Hegel's a priori deductions operate within the same metaphysical system; the same is not so for empirical science. In a moment we will see that implicit in all of this is an underlying realism at work. That is, the manifestation of the logical categories in elemental sensibility is not simply the manifestation of a priori forms that Hegel thinks underlie and make possible experience (as Kant does). Rather, they also capture what is really going on in nature independently of our judgements.

Before we proceed to an analysis of Hegel's realism we need to say a little more about the distinction between phenomenological sense experience and empirical science. We have already seen that phenomenological experience is informed by rationalist metaphysics and we will see now that Hegel is sure that science is irreducibly empiricist. This discussion will be important not only because it will inform my

CR appraisal of Hegelian realism but also, of more immediate interest, it involves another aspect of basic sense experience in addition to its simple elemental character. This is, namely, that basic to our common sense is the idea of an internal dynamic of conflict within the elements themselves and also a conception of material bodies as governed by internal dynamics to individuate themselves against their elemental background. In this discussion we will also see in more detail how elemental experience is the out-working of the a priori logical categories.

#### 4.3.3 *Scientific metaphysics and protoconceptual dialectics*

The whole of Hegel's account of science is that its attendant metaphysics assumes an empiricist account of causation. This means that scientists account for events in terms of external laws; that is, they do not believe that the dynamic for change and development in natural objects is to be located within them (i.e. immanent) but from some external force influencing them. In the *PON* he makes himself clear on the issue:

The inadequacy of the thought determinations used in physics [science] may be traced to two very closely connected points. (A) The universal of physics is *abstract* or simply formal; its determination is not *immanent within it*, and does not pass over into particularity. (B) This is precisely the reason why its determinate content is *external to the universal*, and is therefore split up, dismembered, particularised, separated and lacking in any *necessary connection within itself*; why it is in fact merely finite.

(Hegel 1970a: §246, 202; italics mine)

By saying that the 'universal of physics is abstract' Hegel means that scientists' account of universality is not one that recognises instantiations of natural objects as generations of the concept. In other words, they fail to acknowledge the implicit rationality within natural forms; rather, they are seen as inert, purely material 'things'. As a result, they presume that each natural form's 'determination is not immanent within it'. This is because as bare, static things, scientific metaphysics cannot think of natural forms as generating their own particular instantiations and so they posit change as coming externally. Nature's implicit rationality takes the form, Hegel supposes, of a dialectical interconnection between the elements themselves and also an asymmetrical dialectical relation between the elements and individual material bodies struggling to individuate themselves both through and against the elements that pervade them. Both phenomena are explicable in terms of an intrinsic rationality manifest to basic sense experience but missed by empirical science.

The interconnection and conflict between the elements is stated by Hegel in the following terms:

The physical process is determined by the transmutation of the elements into one another. This transmutation is quite unknown to finite physics, in which the understanding always holds fast to the persistence of abstract identity, whereby the elements, being composite, are merely dispersed and separated, not really transmuted. Water, air, fire and earth, are in conflict within this elementary process.

(Hegel 1970b: §286, 44–5)

The only way we can reasonably understand this process is if we detect an underlying rationality that provides its dynamic. As Hegel argues, 'the elements . . . [are] developed out of implicitness as moments of the Notion' (Hegel 1970b: §286, 42) and are 'universal matters, particularized solely in conformity with the moment of the Notion' (Hegel 1970b: §286, 35). What he means here is that the elements are *developed* and *particularised* as distinctive elements as a consequence of rationality decreeing that by doing so they resolve tension within them. Thus, for example, he describes fire as a pure 'ideality', which is expressed sensibly in its act of destruction. He argues '[f]ire is the appearance of being-for-itself, the ideality which attains the moment of appearance in which destruction becomes evident' (Hegel 1970b: §286, 45); '[f]ire is existent being-for-itself, which is negativity as such' (Hegel 1970b: §283, 39). Air, like fire, has the conceptual character of a 'being-for-self', i.e. 'the unobtrusive destructive principle positing that which is of an ideal nature' (Hegel 1970b: §286, 45) which breaks from this ideality 'into the inert neutrality of its opposite' (Hegel 1970b: §286, 45) when it becomes water and vice versa. The crucial point in terms of our present discussion is that Hegel immediately follows these comments with the point that '[t]here is no difficulty acquainting ourselves with this process, for it is evident in experience and observation' (Hegel 1970b: §286, 45). In other words, as part of our intrinsically rational sense experience we are capable of apprehending the particularising process that the elements undergo.

Hegel's point about air leads us conveniently on to his analysis of the rationality of material bodies themselves. There is a dialectical tension between air and individual material bodies, both organic and inorganic:

Air is . . . purely corrosive and hostile to the individual, which it [the individual] posits as a universal element . . . Organic being . . . comes into conflict with the air through respiration, the elements in general being in a state of conflict with it. A wound, for example,

only becomes dangerous through exposure to the air. Only organic life has the determination of perpetually restoring itself in the process of its destruction. Inorganic being, which cannot endure this conflict, must decay and . . . it is ceaselessly attacked by the air.

(Hegel 1970b: §282, 37)

In other words, material bodies are intrinsically inclined to individuate themselves against the 'corrosive' influence of their elemental background (Stone 2005: 130). Hegel concludes that this tendency on the part of material bodies to resist their own dissolution by the elements is evidence of a rational response to tension, a response that is central to the process of the individuation of natural objects. Lacking such a rationalism, empirical science is again unable to account for the immanence of change and struggle in the development of the natural world. Science erroneously claims, according to Hegel, that 'when such a[n] [organic] body is dissolved, fine particles of it continue to float about in the air . . . Physicists are in fact reluctant to allow these bodies to disintegrate' (Hegel 1970b: §282, 37). Crucially, he then says that science, 'ought not to feel so much compassion for matter' (Hegel 1970b: §282, 37) because matter 'passes away' (Hegel 1970b: §282, 37), presumably into elemental nature.

This makes the universals posited by this metaphysic necessarily abstract in Hegel's account because it has no grasp of the internal dynamics provided by the concept. Scientific metaphysics, in short, makes the cardinal error of assuming that the isolated and internally inert material bodies that the empirical process of experimentation uncovers apply to each and every facet of nature:

It is taken to be a great scientific accomplishment that the determinations which appear in the processes of isolated bodies may also be recognised and demonstrated in the universal process of the Earth. It is only in the field of these isolated bodies that the determinations immanent within the free existence of the Notion are reduced to a relationship in which they are mutually external, and exist as mutually independent circumstances. The activity also appears as an externally regulated contingency, so that its products, too, remain the external formations of corporealities as persisting in their independence.

(Hegel 1970b: §286, 42)

This process, Hegel tells us, departs not only from the concept (notion) but from the content of basic common sense that is phenomenal experience: '[t]his way of thinking may be seen in the wholesale transformation of phenomenal relationships into partly imponderable

'stuffs' and 'matters' . . . so that not only the Notion, but even common sense is put to rout. It is mainly simple experience which is pushed aside, since assertions of this kind still assume an empirical existence' (Hegel 1970b: §286, 43). This alludes to the distinction between the empirical grasped in empiricism and that of phenomenological experience. And we could say that it is a distinction that indicates the compatibility of Hegelian phenomenology with the strong a priori method; i.e. it is empirical forms identifiable in terms of empirical metaphysics rather than protoconceptual elements of commonsense experience that have a contingent status in Hegel's overall picture of nature.

Hegel thinks that science can describe only the particular characters of natural phenomena, that is, explanations of empirically manifest individual forms. It is important not to lose sight of the fact that natural forms do have a contingent character but only when viewed in isolation from their inner rationality (otherwise the idea of their bipolarity would not be sustainable). But he thinks that, just because it is restricted to this side, science lacks explanatory adequacy. For example, the law that explains the transformation of one natural form into another is genuinely distinct from the change that it is supposed to be the dynamic for. Thus, the external law, by virtue of its externality, cannot fully explain the change in its own terms. But it can partially explain it, in merely contingent terms (Stone 2005: 92). Precisely because it cannot grasp the object in its rationality, scientific metaphysics is oblivious to an internal dynamic that is provided by its concept (Hegel 1892: §121, 190–191; Stone 2005: 93). By explaining the object in this way we are positing an internal rationality that compels it to change in accordance with the development of the Idea.

As Stone has demonstrated, Hegel held that it is precisely the distinction between the protoconceptual elements and the fully individuated material bodies that rational metaphysics posits that allows us to understand why these bodies have the status of ontological independence and individuality in nature. And is it precisely this distinction that articulates, on the one hand, the rather stale Humean doctrine of nature as made up of bare, discrete and internally inert things and, on the other, the phenomenological grasp of nature as fluid, internally dynamic and elemental.

Having expounded this (in my view) accurate interpretation of Hegel's system it is now time for us to proceed to my appraisal of it. I will do this from the perspective of the DCR philosophy of science, the main principles of which I broadly accept. Although it is obvious that both Hegelian phenomenological realism and DCR are extremely critical of empirical metaphysics, I will show that this need is created out of rather differing approaches to what philosophical deduction informs scientific inquiry. Whereas Hegelian realism is borne out of

Hegel's contention that science is irreducibly empiricist, DCR holds to the view that the distinction between the real categories of nature and empirical inquiry can be sustained without having to conclude that scientific knowledge can only ever have a contingent status within metaphysics.

#### 4.4 Phenomenology and Hegel's 'irrealist' philosophy of nature

##### 4.4.1 *Phenomenology as realist philosophy*

Stone asks a rather important question: in what way does the congruence with sensibility make phenomenologicalism more accurate in describing real nature? How does basic elemental sensibility enable us to penetrate objective structures in nature (Stone 2005: 130–1)? To be more precise, Hegel needs to show us how the protoconceptual is reflective of real processes in nature that would thus imply that what we are experiencing is not just an intrinsic aspect of sensibility but actually obtains in nature itself. This attempt to incorporate a sense of realist philosophy into Hegel's phenomenology will be of importance to my criticisms of his system, below, and so it is worth rehearsing Stone's defence of it here.

According to Stone, Hegel thinks that basic sensibility is veridical in that it 'puts us in contact with objective structures or patterns that really obtain in nature (where these structures are not only the elements but also objective processes of self-qualification and individuation that natural bodies undergo)' (Stone 2005: 131). In other words, Hegel thinks that the processes of elemental transmutation in nature and individuation undergone by material bodies that we saw him discuss above are not just phenomena of our sense experience but are *real processes* that sensibility has, throughout history, a developing conceptual grasp of. This is because, as emergent from nature, the human senses are capable of apprehending the basic objective processes in elemental nature and in the individuating processes of material bodies. There is precious little in the *PON* (or anywhere else for that matter) to support this thesis and, to be fair to Stone, she admits that 'Hegel can hardly be said to have fully worked out his argument for the veridical character of sensibility . . . [and so the] phenomenological argument for his rationalist metaphysics of nature remains somewhat inconclusive' (Stone 2005: 132). The passage that she points to in the *PON* is complex and for whatever reason she does not really exposit what Hegel is saying in it in sufficient detail. It occurs in chapter 3, section 3, entitled 'Animal organism', and the basic point Hegel is making can be broken down into a number of sections. In essence, Hegel thinks that

sense represents our conception of ourselves as a pure ideality where we are at once aware of ourselves and have an objective understanding of ourselves as grounded in space and time:

As it [the self of the organism] perceives something which is distinguished from it by being spatial and temporal, this distinction undergoes an immediate nullification. This movement of intuition is the universal element of *sense*. Sensibility was precisely this vanishing of determinateness into the pure ideality of the soul or ego, which remains with itself.

(Hegel 1970c: §375, 137)

Thus, '[t]hrough its sensation, an animal determines itself in a particular way . . . , and is not merely aware of itself, but of a particular moment of itself. A sentient creature is distinguished from a non-sentient by its becoming a particular moment of itself' (Hegel 1970c: §357, 137). In this way, an external natural object is 'independent and external' but it is also 'to an equal extent immediately transformed, and given an ideal nature as a determinateness of my feeling; what I contain is the same as that outside me, it is merely its form which is different' (Hegel 1970c: §357, 137). This last passage is crucial because Hegel is quite clearly saying that the process of sensation shares the same character as external objective natural processes, the only difference being one of 'form'. There is a clear identity between what we apprehend in nature and what is actually going on in nature itself.

I will explore the implications this has for Hegel's ontological realism below. But for now it is enough to be aware that this parallel between the structure of sense experience and that of objective natural processes by virtue of the former's emergence from the latter provides the grounds, Stone argues, for attributing to Hegelian phenomenology a realist credibility that empirical science lacks precisely because it represents the break from this basic continuity intrinsic to sense experience. The latter therefore is 'incapable of generating accounts that are true to nature's real, elemental mode of being' (Stone 2005: 132–3). As we will see shortly, I think that Hegel's critique of empirical science as exhibiting scepticism about capturing real processes in nature would be valid but only on the condition that it is necessarily committed to empiricist (Humean) metaphysics. But I will contend that there is no reason to suppose that scientists consciously or unconsciously operate with such assumptions about their subject matter. In any case, the phenomenological alternative whereby at the moment of sense experience we have *direct* access to a rationally pervaded world as it really is represents an unsustainable realism. This is by virtue of the subject–object identity error whereby we lose the necessary distinction between the



object that we are trying to understand and the process by which we understand it. This is the error of *subjectivism* in our truth claims, as we have seen in subsection 1.2.3.

#### 4.4.2 *Problems with Hegelian realism*

To be fair to Hegel, what seems immediately obvious is that he shares with CR the belief that there is a clear distinction between the real structures of nature and their manifestation in experimental conditions. We saw that such a distinction leads him to posit a fundamental bipolarity in nature between enmattered rationality (what critical realists would call real causal structures) and its purely material non-rational side, captured in empirical science. But this is not motivated by any *ontological* difference between the real and the empirical. Although Hegel is alive to the need to distinguish between real factors that cause events and the methods whereby scientists try to understand them, this is not because he thinks that we need to distinguish ontologically between simple empirical events as such and their non-empirical causes. Furthermore, I suggest that it is Hegel's erroneous view of experimental processes and his belief that scientists equate the bare empirical regularities identified as constitutive of what is going on in the real world of open systems that compels him to reduce science's epistemic function to the status of identifying contingencies that can be incorporated into an overall view of nature when they correspond to the a priori forms.

There are two things worth pointing out in this. First, as I have already suggested, scepticism about science is quite unnecessary because it is perfectly possible to maintain the distinction between ontologically real structures and the means whereby we gain scientific knowledge of them without stepping outside the parameters of scientific metaphysics. That is, it is possible to develop and conceptualise a priori forms deduced a posteriori from scientific results without the former losing their explanatory import and epistemic coherence or elevating science to an absolutist status. All of this is possible if we dismiss the rather popular misconception in the philosophy of natural science (that Hegel seems to share) that scientists always operate within a (usually unconscious) *empiricistic* system. And we can dismiss this misconception if we can convincingly show that the simple identity between bare empirical events manifested in laboratories and the real world is not a crime scientists are in general guilty of but is something that actually defies the whole logic of scientific experimentation.

Second, Hegel's approach to sense experience is, as I have suggested, subjectivistic. As we have seen, the reason why Hegel can posit enmattered real logical categories is because he is sure that phenomenal sense experience is necessarily our direct and culturally invariant acquaintance with rationalistic patterns of behaviour in material forms,

an acquaintance that represents the manifestation of the same rationalistic patterns in the realm of sense experience that Hegel has identified a priori in the logical categories. We saw that Hegel presented the empirical elements and individuating tendencies of material bodies as intrinsic to basic sense experience. This therefore makes it incumbent upon philosophy to do the important groundwork (aided by science wherever possible) of uncovering and developing into full conceptuality from the starting point of our basic experiences of nature and the real structures themselves. There is a crucial *identity* between phenomenal experience and real causal factors in nature. Ontologically grounded structures and causes of empirical phenomena are more or less transparent to reason in Hegel's account (and bolstered by scientific results when they are compatible with it). In CR terminology, real causal mechanisms are identical to the empirical phenomena that they generate. It seems that if Hegel has avoided the epistemic fallacy in his treatment of scientific knowledge it is only because he thinks that it is incapable on its own of achieving the identity that phenomenal experience and philosophical rationalism can; it cannot make real structures transparent to it by virtue of its alleged empiricism. It is certainly not because he thinks that an identity is *in itself* a failure to grasp real structures. Hegel is guilty of the epistemic fallacy after all because there is no evidence of transfactual dimensions to his apriorism and its attendant phenomenological realism.

All of this indicates very different views of the metaphysical importance of science between Hegel and Bhaskar. Because of its irreducible empiricism Hegel is sure that science in itself is metaphysically bankrupt, as we know. Rather, it is the philosophical extrapolation from basic sense experience that gives us an understanding of the real world, with science, hamstrung as he thinks it is, playing a supporting role from the outside. On the other hand, Bhaskar's insistence that there is no identity between the empirical and the real means that there is a reliance of philosophy on science because only the latter can create the conditions whereby real structures are isolated and made transparent to reason. The very structure of scientific inquiry – the need to establish experimental conditions – suggests an infinitely complex world of interacting causal mechanisms which philosophers then must use as a starting point for their own inquiries into the nature of that world. It is therefore scientific inquiry, rather than the straightforward sensible experience of this complex world, that provides the basis for philosophical extrapolation and deduction. This is why Bhaskar, in his pre-spiritualist writings, at least, claims that apriorism must use a posteriori scientific findings as its starting point.

It would be instructive to say a little more in relation to my problems with Hegel's subject-object identity. Bhaskar, especially in *DPF* and *PE*, has classified these 'irrealist' errors under the headings of

*immanent teleology, realised (conceptual) idealism and spiritual constellational monism.* It is to my examination of these terms that we must now turn.

#### 4.4.3 *Hegel's actualism: immanent teleology, realised (conceptual) idealism, spiritual constellational monism and ontological bi-/polyvalence*

Bhaskar discusses many of the issues that we have already covered by placing Hegel in the context of the dialectical rationalist tradition to which he belonged, including terms and concepts associated with ancient dialectics dating back to the time of the Greek philosophers of antiquity. Although the opacity of Bhaskar's prose makes much of what he says here difficult to grasp, it seems to me that for him the *concept* is evidence in Hegel's work of the *Eleatic* strand of the ancient dialectics whereby a realm of infinite essences is speculatively posited to provide an ultimate explanation for why the material world should ever have come to exist. Bhaskar contends that the process of making rationality enmattered (or as he refers to it, the *descending* phase of the Ionian strand of ancient dialectics) means that Hegel is presenting a material world governed by an *immanent teleological* process. Some commentators, including Bhaskar, have interpreted this as evidence of God's purpose in nature; a cosmic supersubject whose intelligence is externalised to form the material world thereby making it unconscious or petrified. Charles Taylor, for example, thinks that this essentially divine explanation of nature is reliant on us being 'able to give a plausible interpretation of nature as "petrified spirit", as a precipitate of a cosmic spirit on the way to a fuller realisation in self-consciousness' (Taylor 1975: 45). This idea of 'nature as "petrified spirit"' is a useful phrase of Hegel's<sup>15</sup> to describe the thought-matter bipolarity, and for Bhaskar it corresponds to the *descending* and *ascending* phases of the ancient *Ionian* dialectic. Thus, according to the Ionian strand a material dimension to reality is posited as the necessary condition of possibility of infinite spirit coming to philosophical self-consciousness and that material reality is engaged in a dialectical process to become reunified with spirit. And so in the Ionian dialectic we see the out-workings of the Idea and in the descending phase we have an explanation for why nature exists:

in the Hegelian spiritual odyssey of infinite, petrified (natural) and finite mind, the principle of idealism, the speculative understanding of reality as absolute spirit, is unfolded in the shape of an immanent teleology which shows, in response to the problem posed by the descending phase of the Ionian strand, how the world exists . . . as

a rational totality *precisely* so as (infinite) spirit can come to philosophical self-consciousness.

(Bhaskar 1993a: 18–19)

Crucially, Bhaskar contends that this immanent teleological process involves a form of subject–object identity, namely *constellational identity* (Bhaskar 1993a: 19):

In this dialectical inscape . . . the major, typically idealist term (thought, the infinite, identity, reason, spirit, etc.) over-reaches, envelops and contains the minor, more ‘materialist’, term (being, the finite, difference, understanding, matter, etc.) in such a way as to preserve the distinctiveness of the minor term and to show that it, and a fortiori its distinctiveness, are teleologically necessary for the major one. Reconciliation is in the midst of strife, and everything that is separated finds itself again . . . in the movement of self-restoring sameness or self-reinstating identity, which is the life of absolute spirit.

(Bhaskar 1993a: 19)

In other words, we have a form of idealism that does not seek to undermine the distinctiveness of empirical material processes in nature but seeks to define them as ‘teleologically necessary’ for spirit. As Bhaskar says, this immediately suggests a thought–matter, subject–object identity (Bhaskar 1993a: 91) at the heart of the teleological process and precisely the sort of identity that links Hegel’s a priori logical categories and phenomenological experience – that is, a teleological identity between real structures and empirical sense experience. As a result, intransitivity and transfactuality are dissolved; we lose the ‘aboutness’ of our experience and so fall into the errors of irrealist subjectivism.

In its simplest terms, this is the belief that all conflicts, strife, contradictions and anomalies that we experience can be resolved in speculative thought, and Bhaskar refers to this as Hegel’s attempt to *realise* in the material world of flux *idealism*. In terms of Hegel’s phenomenological theory it is the reassurance that in all our experiences of the world there is an underlying rationality (as he reveals in the *PS*, *EL* and *SL*). And in terms of his phenomenological realism, it is the additional reassurance that this rationality actually exists in that world (as he reveals in the *PON*). This process is described by Bhaskar in terms of Hegel’s famous understanding–dialectic–reason (U-D-R) movement (Bhaskar 1993a: 21). This is the passage that the human consciousness goes through once it has broken from its *pre-conscious* form of awareness (Stone 2005: 118) and into *sensuous consciousness* (Stone 2005: 37–40) whereby the mind posits itself as an individualised, separate

entity from the materiality it experiences around it. Bhaskar calls it 'the transition from pre-reflective thought . . . to the understanding' which is necessary 'before we are in a position to engage in ordinary (non-speculative) science or philosophy' (Bhaskar 1993a: 21). Hegel refers to it as the 'fixity of characters and their distinctness from one another' (Hegel 1892: §80, 143) and in the *PS* as 'thoughts which are themselves familiar, fixed, and inert determinations' (Hegel 1977a: §32, 18). In the *PS* he also says that under the influence of the understanding 'what is bound and is actual only in its context with others . . . attain[s] an existence of its own and a separate freedom' (Hegel 1977a: §32, 18–19). At the beginning of spirit's necessary act of self-externality and the process towards its reunification in absolute spirit Hegel hails the understanding as 'the most astonishing and mightiest of powers' (Hegel 1977a: §32, 18). As such, this suggests the interrelation between basic sense awareness with its innate apprehension of matter's rationality and the scientific view of nature as intrinsically non-rational, being as it is tied to empiricist metaphysics. This necessary contradiction energises the U-D-R process.

Crucially, it is the guidance towards a fuller grasp of reality that basic rationalistic sense awareness provides to science that leads to the superseding of the fixed determinations of the understanding in the emergence of the second *dialectical* stage. Scientific study of the empirical world that is characteristic of the concerns of the understanding is therefore reliant on an immanent dialectical process of its own negation. Without it Hegel contends that scientific progress is impossible: '[t]hus understood the Dialectical principle constitutes the life and soul of scientific progress, the dynamic which alone gives immanent connexion and necessity to the body of science; and, in a word, is seen to constitute the real and true, as opposed to the external, exultation above the finite' (Hegel 1892: §81, 147–8). Fixed determinations undergo a self-supersession when they recognise themselves as what they are – one-sided limitations (Hegel 1892: §81, 147). The mind then *necessarily* formulates alternative abstract notions that usually represent the antithesis of the original determinations. It breaks us out of the rigidities of the understanding and introduces us to new alternative ideas. It is thus a necessity if knowledge is to improve and develop.

The resolution of these contradictions is achieved at the moment of *reason* and itself creates a new concept which begins the U-D-R movement again. But it is not the harmony and unity of the understanding's world; rather it is an infinitely greater oneness of *pre-understanding* thought, by which Hegel means pre-reflective thought that 'is the right of every human being on whatever grade of culture or mental growth he may stand' (Hegel 1892: §82, 152–3). This is reason as it exists prior to the limitations of empirical thought and is as such a *higher unity*. This is precisely the mode of thinking that Hegel thinks represents



the original unity of thought and matter in thought (i.e. the object as a substance universal) and so the transcendence of consciousness as such in the return to soul. It follows, therefore, that Hegel should also sometimes call reason *speculative thought* (Findlay 1958: 66). And so reason is possible by virtue of the fact that consciousness now is aware of the necessary antithetical conditions which gave rise to unity at the level of the understanding (Findlay 1958: 78), thereby negating itself.

The general theme that emerges here is that of *dialectical determinate negation*, or what we saw in subsection 2.2.2 Bhaskar refer to as *preservative dialectical sublation*. This means that negation is not mere nothingness but represents progress – the negation of U is an essential and necessary moment in a general development towards absolute spirit. Each new form is the presence of past forms while engaged in a continual process of activity aimed at the negation of their current state of existence or, as Hegel puts it in the *PS*, ‘the exposition of the untrue consciousness in its untruth is not merely a negative procedure . . . the result is conceived as it is in truth, namely, as a determinate negation [and so] a new form has thereby immediately arisen . . .’ (Hegel 1977a: 50–1).

The basic problem Bhaskar has with this process is its teleological character or, more precisely, the fact that it is ‘constellationally closed, completed . . . an achieved identity theory’ (Bhaskar 1993a: 24). Understood as the out-working of the Idea, all of our experiences are teleological necessities as the ‘conformity of an object to its notion’ (Bhaskar 1993a: 26). This dialectical epistemology ‘grasps concepts and forms of life in their systematic interconnections, not just their determinate differences, and considers each development as a product of a previous, less developed phase’ (Bhaskar 1993a: 22). In short, Hegelian (teleological) epistemology involves *dialectical preservative sublation*.

Understood in terms of Stone’s phenomenological interpretation of Hegel this makes perfect sense – an epistemological process of developing conceptuality governed by an underlying dynamical rationality. The problem for Hegel is, as we have already identified, that this is a process whereby the subject matter of our experiences is not adequately distinguished from the way in which we conceptually represent it at U and so it is fatally hamstrung by a subject–object identity, subjectivism and, hence, the epistemic fallacy.

One more consequence of this that is worth pointing out refers specifically to what Bhaskar calls an error in the domain of ontology that directly parallels the epistemic fallacy, known as the *ontic fallacy* (Bhaskar 1993a: 181). We saw in subsection 1.2.3 that this was quite simply is the ontological error of reducing our knowledge of the object to the object itself (i.e. the reverse of the epistemic error of reducing the object to the process whereby we gain knowledge of it). In *DPF* Bhaskar calls this ‘the compulsive determination of knowledge by being

... in the guise of reified facts or hypostatized ideas' (Bhaskar 1993a: 4) and elsewhere in the book 'the presupposition of the determination of knowledge by being' (Bhaskar 1993a: 90). Hegel's version of it is called *spiritual constellational monism* and is, in Bhaskarian terms, the eternalisation of actuality (Bhaskar 1994: 122). In accordance with the subject-object identity of phenomenological theory, empirical concepts will be posited as identical exemplifications of ontological categories just as (in the case of the epistemic fallacy) ontological categories were, as we saw, identical to empirical concepts. The *ascending* phase of the Ionian strand is important here (just as the descending phase is important to epistemological dialectics) because Hegel believes that the empirical is interpreted as necessary moments of spirit's self-externality. And so the (immanent) world of the empirical is transcendentised as corresponding to real logical forms. Hegel thus advocates a speculative ontological dialectic (i.e. his strong a priori metaphysics) that is premised on a basic empiricist ontological error. Hegel transcendentises actuality (i.e. the world of events) and in so doing eternalises it (Bhaskar 1994: 121–2). As Bhaskar argues, 'Hegel presents ... the process of thinking generally, transformed into an independent subject (the Idea), as the demiurge of the empirical world. ... [Hegel's] thought actually consists in uncritically received empirical data ... which is in this way reified and eternalised' (Bhaskar 1994: 126). By 'uncritically received empirical data' Bhaskar is clearly alluding to the basic error of equating empirical sense experience with real structures. And so spiritual constellational monism must, just like realised idealism, involve the identity between the realm of the empirical and that of real a priori essences with the direction of the erroneous process reversed.

Having examined the failings of the logical categories applied to both the dialectics of human consciousness and matter it is necessary to proceed to see the implications that these failings have for Hegel's philosophy of social science. As we will now see, the 1M and 2E errors we have just outlined have important consequences for 3L and 4D aspects of the Hegelian system.

#### 4.4.4 *Hegel, detotalisation, deagentification and the unhappy consciousness*

I introduced in passing in subsection 2.3.1 how the implicit empirical realism of Kant and Hegel's immanent metaphysics of experience leads to the Aristotelian fault-line and the primal squeeze leading to the unhappy consciousness. We also saw how the unhappy consciousness, by virtue of its denial of natural necessity, involves 2E ontological monovalence and so 3L detotalisation. Thus, for Kant and Hegel, natural 2E spatiotemporal processes are disconnected from their intrarelations with each other making their inherence in 3L totalities impossible.



I want to briefly comment on the implications of this for the social world. In subsection 3.4.4 we discussed this in relation to Kant, and given that Hegel in the end cannot seem to get much beyond the terms of transcendental idealism, then it should not surprise us that the problems of deagentification at 4D is applicable to him as well.

Nevertheless, Bhaskar thinks that there are important 4D errors that are unique to Hegel. Specifically, in *DPF* we see that in the social world Hegel is apparently guilty of dissolving causality into teleology, just like we have seen him do in nature. And if that leads to the reduction of processes in the natural world to simple manifestations of the Idea (in accordance with his view of matter as petrified mind), then it follows that if we extend Hegelian natural philosophy into the social world, then social rhythemics are going to be reduced to a similar status. This is in fact what Bhaskar thinks happens in Hegelian social theory:

At 4D he [Hegel] is unable to sustain essential transformability . . . transformative . . . totalising . . . transitional praxis . . . The most relevant signposts here are . . . the absence of intransitivity and the autonomy of nature, which Hegel sees under the aspect of petrified mind . . . the absence of natural necessity (and transfactual efficacy) and of activity irreducible to mind . . . and the absence of the category of absence and of the irreducible geo-historicity of social forms.

(Bhaskar 1993a: 340)

For Bhaskar, this has the 4D consequence of confusing specific forms of objectification with alienation (Bhaskar 1993a: 341). We have seen in subsection 1.3.3 that unconscious and conscious praxis involve the objectification of labour power as a necessary feature of the TMSA. We saw that Bhaskar defined the social structure as an emergent phenomenon that has existential autonomy from the intentional praxis that is its condition of existence. But the dependence of the structure on conscious praxis (the intentions individuals occupying social roles have for doing so independent of their unconscious praxis in sustaining them) means that specific forms of alienation of humanity that may result from it (in accordance with EC) can be transformed through causally efficacious transformative praxis. In this way, although the existential autonomy of the social structure from the intentions agents have (that lead them to participate in social positions within it) is a necessary condition of the social world, intentional praxis leaves open the possibility of developing a more fully human non-alienating form of objectification. But the 2E failure to distinguish causality from teleology eliminates the irreducible transience of social structures and forms and thus rules out the possibility of the absencing of conditions of ill-being. With the changes to structures and forms defined in teleological rather

than in spatiotemporal causal terms then, we have the exclusion of the possibility of genuine absenting praxis. Rather, the rational transfiguration of specific (empirically manifest) social forms has the consequence of stifling genuine absentive causal change and provides justification for systems such as capitalism that Bhaskar believes function on the basis of ill-being. We saw in subsection 2.2.3 that social structures that absented conditions of human freedom were in fact *detotalities* on account of the resulting conflict between those social agents who wished to preserve the status quo and those who wished to transform it. In DCR language this was the struggle to absent power<sup>2</sup> relations and their attendant TINA formations (i.e. ideologies) in order to absent conditions which were inimical to the satisfaction of concrete singularities (i.e. human species being). 3L detotalisation therefore leads to the absenting of the absence of the *eudemonistic* (i.e. emancipated and free) society which we are driven on towards by virtue of an *axiological necessity* (i.e. the rather utilitarian principle that we are driven to realise happiness and freedom). We saw that the worker–capitalist relation is a good example of a 3L (de)totality in that there is symmetrical existential presupposition (dialectical connection), asymmetrical determinate negation, and that they had a tendency to be mutually exclusive (dialectical contradictions). And we also saw that the dynamic of retotalisation of relations between social actors in the eudemonistic society was provided by absentive transformative praxis.

Bhaskar thinks that Hegel's rational transfiguration of empirical regularity ends up denying the possibility of absentive praxis because it involves what the former calls a TINA *compromise*. This occurs simply when we frustrate axiological necessities by declaring existing conditions to be far from perfect but the only ones that can possibly work. Bhaskar thinks that the completion of the teleological processes in absolute thought is achieved via a series of TINA compromises:

Indeed the Hegelian dialectic may be regarded as a progressive compounding of Tina compromise upon Tina compromise, until in the self-realisation of the absolute idea and the final overcoming of its self-compromise, in the absolute spirit of absolute idealism we achieve, at once, absolute clarity and absolute compromise . . . negativity is undone, contradiction is cancelled, the implicit explicit, the absent present . . . and actuality rationalised, and we are offered ex post . . . another sort of compromise: constellationally conciliatory compromise with the prevailing order of things, rationally transfigured under the configuration of the absolute idea.

(Bhaskar 1993a: 118–19)

Thus, the teleological dynamic of absolute idealism has the TINA compromise effect of 'closing a potentially, necessarily and open total-

ity, and so shutting out the possibility of further essential progress' (Bhaskar 1993a: 119).<sup>16</sup>

The consequences for 4D of both Hegelian and Kantian recourse to empirical realism and Bhaskar's resolution of them via ontological bi- or polyvalence are shown in Figure 4.1.

So far we have seen how useful Bhaskar's philosophy of science is in our critique of Hegelian phenomenological realism. But I feel that

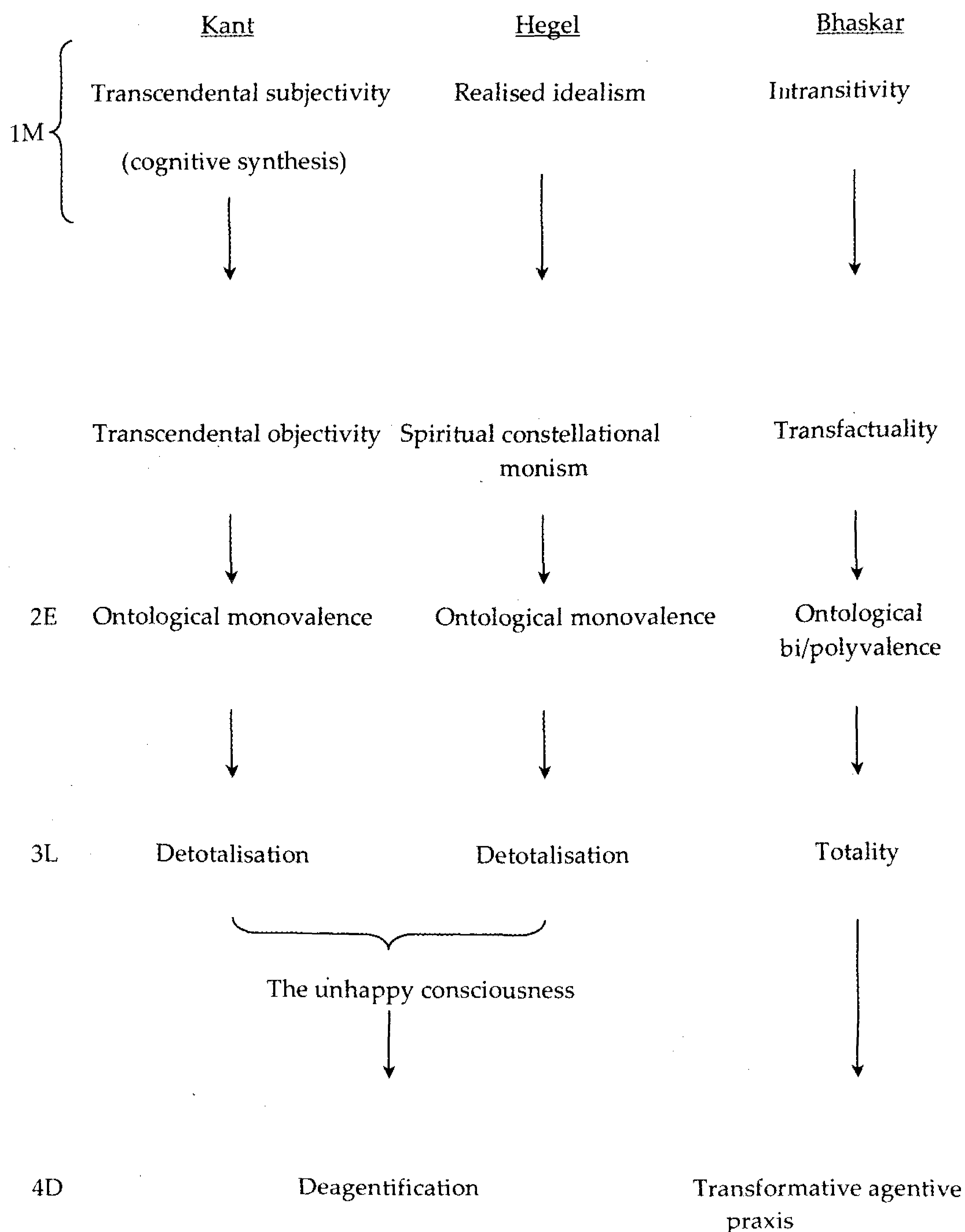


Figure 4.1 The Kantian and Hegelian approaches from first moment (1M) to fourth dimension (4D) to problems concerning empirical realism and their resolution by Bhaskar.

the progress his work represents in the field of ontological realism is at risk by rejection of materialist philosophy in his more recent writings (most notably *From East to West: The Odyssey of a Soul* (FEW; 2000)); that is, in his 'spiritualist' turn. I will now argue that this effectively constitutes an engagement with philosophical idealism on the issue of the ultimate origins of the universe that is hardly consistent with realism. As a result, his ontological realist system that we have seen is so useful in demolishing absolute idealism becomes susceptible to its own critique.

#### 4.5 Bhaskar's 'spiritualist' turn and the threat to ontological realism

##### 4.5.1 *Philosophical idealism and judgemental rationality*

My reasoning for why I think Bhaskar is creating problems for himself should already be obvious from what I have been saying concerning the philosophical foundations of DCR. Its ontology is of a stratified and complex world of emergent and causally efficacious strata producing a non-identity between the empirical and the real. This is the result of deduction from the logic of actual scientific processes. This principle, admittedly, is not one that is strictly speaking intrinsic to CR and I am sure that there are many thinkers both within and without the school who would reject this point. Indeed, it is possible to subscribe to the ontological realist principle that the world is made up of various strata independent of our knowledge, each one emergent from more basic ones but containing real irreducible causal powers of its own, without committing oneself to any position on which strata are ultimately basic to or have emerged from. This has given licence for Bhaskar and others to flirt with spiritualistic contentions that the ultimate cause of the material universe might just as easily have been provided by some sort of cosmic superintelligence (i.e. God) as by non-conscious material processes themselves.

Such a position has been taken up by Bhaskar in *FEW*. But it is also taken up by Margaret Archer, Andrew Collier and Douglas Porpora in their recent work *Transcendence* (2004) when they say '[f]rom the standpoint of ontological realism, reality in general exists quite apart from our knowledge of it. There is then nothing inappropriate about whether that reality includes God' (Archer *et al.* 2004: 10). In other words, on the basis of the CR take on how we can gain knowledge and evidence derived from experience, it is just as reasonable to posit a mind-independent God as it is for atheists to posit a purely material world. As a result, for the latter to place the burden of proof squarely on theists to prove God's existence is wrong because atheists can fare no better when asked to prove his non-existence (Archer *et al.* 2004:

16). They think that *judgemental rationality*<sup>17</sup> holds here in the same way that it does when a scientist commits him- or herself to a scientific theory even when early research findings may from time to time not directly support it (Archer *et al.* 2004: 15–16).

Below I argue that this claim for parity of esteem is valid only in the extremely limited sense that a general belief in God is, in principle, compatible with ontological realism. But it begins to break down in the light of the materialist–realist ontology of the sort I am proposing that is strongly buttressed by scientific results that indicate a universe without design. To be more precise, I argue that the ‘universe by design’ argument is problematic to say the least insofar as DCR grounded in materialist ontology has already provided us with a picture of a self-sustaining, emergent, stratified and dialectically developing world wherein non-material emergent levels (such as the human mind) are existentially dependent on (but not reducible to) more basic material levels. In other words, we have a materialist worldview that is provided with *ontological significance* by scientific inquiry that clearly points to an ordered and structured universe without conscious design. In light of this, the burden proof must lie fairly and squarely with theistic ontology to demonstrate why all of this is in fact the work of some cosmic supersubject by whose hand it is energised.

#### 4.5.2 *Ontological realism and philosophical materialism*

Bhaskar and his company’s theistic argument is all the more strange given that they are trying to formulate it within a philosophical tradition that seems to me to have been more effective than most in undermining claims that a recourse to God or an abstract ‘Idea’ has any place in realist ontology. Indeed, Bhaskar is violating an important founding principle of his own TR that ‘what is apodeictically demonstrable is also *scientifically comprehensible* . . . Philosophy consists in an irreducible level of discourse; it does not constitute an autonomous order of being’ (Bhaskar 1998: 6; italics mine). I have demonstrated in Chapter 3 how a defining characteristic of CR is Bhaskar’s realist inversion of Kantian transcendental idealism, an inversion which hinges on the critique of Kant’s hypostatizing of the object-in-itself as an existent realm beyond scientific knowledge; i.e. it is something ‘apodeictically demonstrable’ but not ‘scientifically demonstrable’. We saw above how the exposure of Hegel’s irrationalism using DCR methods hinged on how the latter’s philosophical deduction of key ontological realist terms – transfactuality, depth, emergence and stratification – were dependent on the logic of scientific experiment. That is, although I have conceded that there is nothing in principle that ties Bhaskarian ontological realism to materialism, the fact is that in a very practical sense it has emerged as an effective philosophy precisely because it has been grounded in an analysis of

actual scientific practices, including strict epistemic criteria of what is knowable. Given this, it seems difficult to know how we can extricate DCR from the conditions of its epistemic utility, namely scientific ontological realism.

To see an example of this utility we need only look to our own discussion of how Bhaskar's dialecticising of CR can be used to construct an effective undermining of the Hegelian claim that change and development in the material world is governed by the Idea. We have a dialectical account of material change without recourse to speculative philosophy that is, as we have seen, nothing more than a form of subjectivistic identity theory. It is my materialist spin on Bhaskar's dialectic that Hegel's internal rationality of individual bodies struggling to individuate themselves against their elemental background is not evidence of the out-workings of the rational Idea but rather of *internal dialectical laws of matter* animated by the ontology of absence – what Bhaskar would call *ontological bi-/polyvalence*. In short, if we sustain intransitivity and transfactuality then our dialectical theory will exemplify ontological bi-/polyvalence. This is essentially what happens when we incorporate the category of *absence* into CR terms (i.e. we *dialecticise* them). Absences are basically transfactual causal mechanisms understood in *spatiotemporal* terms. Thus, Bhaskar argues that to posit real determinate transfactual absences is to posit an ontological *bi-/polyvalent* world and to deny them is to posit an ontologically *monovalent* world. So DCR must involve positing real (i.e. non-actual) absences or, as Bhaskar says, 'reference to absence is quintessential to non-idealistic dialectic' (Bhaskar 1993a: 43). To be sure, the out-workings of this 'non-idealist dialectic' involve the principles of an intrinsic bipolarity in the natural object to which Hegel introduces us. But it seems to me that pure materiality itself is exhaustive of the bipolarity rather than forming the mere 'externalised' dimension, as Hegel would have us believe. For example, in *DPF* Bhaskar calls materialist bipolarity *heterology*. He tells us that '[i]t is by means of heterology . . . that the forwards or ex ante movement of dialectic unfolds, with the dialectical comment (dc') in particular explicating what is true of, but not present in, some base concept or form' (Bhaskar 1993a: 113). Bhaskar is referring to fundamental contradictory states of existence in an object – when it is 'not true of, or applicable to itself', 'not the same as itself' (Bhaskar 1993a: 113). That is, there will be a detectable bipolarity in the object and it is when an object is in such a heterological state 'that the forwards or ex ante movement of dialectic unfolds'. This is because dialectics help to explicate 'what is true of, but not present in, some base concept or form'.

A good example of heterology applies to ecologism. In the final chapter of her book, Stone seems to suggest that pathologies in the earth's ecological system can be accounted for in terms of empirical

science's neglect of the underlying rationality that animates the natural world, as a result of its 'underlying view that nature is an intrinsically value-neutral realm' (Stone 2005: 136). Hegel's phenomenological realism, on the other hand, 'is capable of "reenchanting" the world, construing it as suffused with value at all points' (Stone 2005: 135). I don't have the space to consider Stone's ethical theory in any detail but can merely look at the underlying contention at the heart of it – that phenomenological sense experience elaborated in terms of Hegel's metaphysical a priori rationality will engender renewed respect for nature because we are no longer viewing it in empiricistic terms. In the hands of a pre-spiritualistic DCR, however, we can see pathologies in ecological systems in terms of a materialist ontology without this necessarily involving value neutrality. This is possible if we understand the pathologies caused to natural beings as the result of human-made disasters in terms of the frustration of their *essential needs*. For example, the harm done to plants and animals as a result of a human-made drought can be seen as intrinsically wrong because it frustrates the realisation of their real (i.e. non-actual) powers and potentials. That is, it represents the absence of the realisation of their capacities. We therefore have the absence of rain, which has significant effects on the capacities of natural organisms to function properly – it creates a fundamental contradiction between the material needs of these organisms and the reality of their frustration because of adverse environmental conditions. A plant or an animal finding itself in such conditions exists in a heterological state because its miserable condition stands in direct contradiction to a condition in which it can realise its causal powers and potential that are its defining characteristics. For example, a water buffalo existing in conditions of drought caused by global warming exists in a heterological state. The important point is that all of this is explicable in terms of a DCR *materialist* ontology whereby, far from rejecting ethical theory, science, in principle at least, can use it to uncover real absences in the natural world that explain pathologies and can prescribe measures to remedy them. All of this provides a plausible and rational account of change that remains firmly within the epistemic criteria of science without recourse to what is, in the end, little more than a form of speculative subjectivistic rationalism. I must stress again that this materialistic take on Bhaskarian dialectics is my own, but it seems to me to be extremely effective in demonstrating how realist materialist dialectics point to the superfluity of philosophical spiritualistic claims about an underlying rational intelligence animating the material world of flux.

As we have seen, Bhaskar, Archer, Collier and Porpora would immediately claim that their theism is not grounded in philosophical speculation but has rational foundations precisely because it can be justified on ontological realist grounds. Significantly, Archer, Collier and Porpora



present what they call the 'transcendence-with-immanence' argument in support of their ontological claims about God's existence (Archer *et al.* 2004: 29). According to this thesis, God is neither entirely transcendent nor completely immanent within materiality. This means that God is not completely 'other' to the material world, which would render him either unknowable or knowable only in terms of a 'supreme mechanism' (i.e. as being the 'first cause' and setting in motion an entirely self-subsistent universe). This is inconsistent with the analytical concept of God as a supremely good Being because He would thus be indifferent to the act of creation (Archer *et al.* 2004: 30). But neither is He completely identical to the world because this creates a whole host of problems concerning how acts of evil can be attributable to the will of a loving God. This argument in fact draws on Bhaskar's incorporation in *FEW* of an additional 'spiritual' stratum of reality into the dialectical emergentist ontology we have seen him develop in *DPF* and *PE*. This augmented realist system is broadly known as *transcendental dialectical critical realism* (TDCR). God creates all the strata of reality and so they are existentially dependent on Him. But, in accordance with CR emergence theory, they are also relatively autonomous and so we cannot say that God is totally immanent within them and so is relatively transcendent from them (Bhaskar 2000: 40–2).

Collier applies this theistic realism to the area of natural theology claiming that it is judgementally rational to posit a teleological view of nature's development energised by God's hand, a move which brings TDCR perilously close to endorsing the sort of Hegelian theistic realism advanced by Charles Taylor and undermined by Bhaskar himself, as we have seen.<sup>18</sup> Collier claims that scientific developments such as Darwinian natural selection have helped to divest biology of the mystery of such things as the functionality of animal organs without recourse to a designing intelligence (Archer *et al.* 2004: 130). But he thinks that teleology is still applicable because there are teleological phenomena in nature that cannot be explained by natural selection, such as 'anthropic coincidences' (Archer *et al.* 2004: 131).<sup>19</sup> It seems to me that this is constitutive of the epistemic and ontic fallacies because it involves making speculative pronouncements about being on the basis of nothing more than gaps in scientific knowledge. One of CR's strengths is that its distinction between transitive and intransitive dimensions leaves open the possibility that philosophical truths deduced from scientific results are in principle open to revision. But Collier's appeal to anthropic coincidences does not accord with this because he is stepping outside the parameters of scientific discourse entirely, the very discourse that protects ontological realism from any temptation on our part to indulge in speculative extrapolations from what we can be fairly sure of to provide explanations for what we are currently ignorant of.

This sort of thinking is also at work in Archer's, Collier's and Por-

pora's explanation of religious experience. They argue that we can use religious experiences as the basis on which to posit real underlying mechanisms which account for it. In other words, they claim that such experiences are useful to ontological realists because they suggest the existence of a supernatural stratum of reality. Thus, rather than religious belief resting on pure speculation or 'blind faith', it is grounded firmly within the judgemental rationality that is also central to making a priori postulations a posteriori about the subject matter of science (Archer *et al.* 2004: 14–21). But the parallel is not convincing. At present there really is no definitive conclusion about the cause of religious experience and it is just as likely (indeed it is probable) that there are psychological and/or sociological explanations for it. But Archer, Collier and Porpora want to use this uncertainty as a reason to grant the supernatural explanation parity of esteem. That is, they want to use *ignorance* as a defence of an ontological realist perspective, something that theologians have been doing for centuries. Prior to Darwinian advances in biology, for example, theories such as Hegel's were persuasive precisely because they occupied epistemological territory that science had not yet penetrated. And so supernatural explanations for the functioning of the organic world appeared as judgementally rational as any until, of course, Darwin cut away the mystery with his theory of natural selection. But in trying to use religious experience (as yet not fully explained by psychology) and cosmic anthropic coincidences (as yet not fully explained in astrophysics) as examples of the rationality of religious belief theists are simply occupying the ever-decreasing territory outside scientific explanation and arguing that religious experience provides a useful alternative rationale. But this stands in direct opposition to epistemic criteria in coherent philosophies of science. Far from making appeals to the as yet unexplained, philosophers of science who work within ontological realism deduce their a priori theories firmly from within the parameters of *what we can know* from what scientific results tell us – that that which is apodeictically demonstrable must also be *scientifically* demonstrable.

And so, on the one hand Collier is guilty of the epistemic fallacy because, in Bhaskar's pre-spiritualist terms, his theory represents the 'conformity of an object to its notion' (Archer *et al.* 2004: 26). And on the other hand, it is constitutive of the ontic fallacy because it parallels the subject–object constellational identity of Hegelian teleological idealism insofar as it involves 'the presupposition of the determination of knowledge by being' (Bhaskar 1993a: 40). To be fair, Collier avoids the subject–object identity error of reducing real processes to the level of the empirical, which we have seen at work in phenomenological realism. And so in a sense the doctrine of God's transcendence-within-immanence enables TDCR to avoid the subject–object identity error of reducing the real to being identical to the empirical. But this is no more

than the vague principle that it is possible to believe in God, about whom we can gain knowledge that must be open to revision. In all practicality this type of thinking has, in retrospect, been reduced to nothing more than superfluous idle speculation as science increasingly occupies territories in which theistic doctrines had for so long claimed supremacy. Given this, theistic ontology is left with two options. On the one hand, it can continue to carve epistemological and ontological roles for itself within these territories, in which case it is nothing more than the imposition of speculative theories on to the facts. On the other hand, it can flee to areas as yet unexplained scientifically where, lacking stringent epistemic criteria, it is free to make unsubstantiated truth claims unchallenged by the infinitely more rigorous criteria of science. In both cases, we are talking about epistemic and ontic subject-object identity errors. In short, by departing from the logic and epistemic criteria of scientific practice, TDCR appears to have more in common with the ontological realism that is central to the Hegelian Idea than to the philosophical materialism that I think is necessary for any workable realist ontology.

My main intention in this chapter has been to suggest that the dialectical ontological realism presented by Bhaskar can be used to expose the irrealist errors at the heart of Hegel's phenomenological realism. A useful way of summarising the dual subjectivistic errors of identity at work in the epistemic and ontic implications of the latter is to refer to the following quotation of Bhaskar's. He says that 'In immanentizing transcendent reality, Hegel collapses the intransitive, structured transfactual and . . . ontological bi/polyvalent reality of scientific investigation to actuality; while in transcendentizing actuality, Hegel eternalises it.'<sup>20</sup> In simple English this means that he commits the epistemic fallacy by positing real logical structures as reducible to the level of events, thereby losing intransitivity, transfactuality and ontological bi-/polyvalence. And he commits the ontic fallacy by doing the reverse – taking human-made empirical regularities as evidence of the out-workings of the concept in matter.

#### 4.6 Conclusion

In this chapter we have seen how Hegel's absolute idealism represents an important critique of the Kantian object-for-us insofar as it establishes the case for a realist dialecticising of a priori metaphysics. But we have also seen that because Hegel grounds his dialectics in a rational transfiguration of the natural world he is unable to progress much beyond Kant. Specifically, we have seen that his attempt to project the constitution of the object-for-us on to the object-in-itself was merely the rational transfiguration of the empirical domain and so he, like his

great German predecessor, remained snared in the empirical realism that he was trying to undermine. This endeavour on Hegel's part is best described as strong apriorism. As we have seen, the out-workings of the phenomenological system and its a priori theory ensnare Hegel in epistemic and ontic errors premised upon the correctness of the basic empirical realist error of positing an identity between the empirical and the real and the equally erroneous assumption that the logic of experimentation is unmistakably empiricistic. Only when we free the dialectical system from subject-object identity and ground it in an ontologically bi-/polyvalent account of the world can irrealist errors be ultimately avoided. This requires reworking dialectics with a CR scientific metaphysics of nature.

We also saw that Hegel's reduction of causation to teleology had the implication in the social world of making absentive transformative praxis impossible, just as Kant's denial of the social object of an ontological status had much the same effect. To be sure, both these philosophers are close to achieving their goals, and to be fair to Bhaskar he does acknowledge this. In *DPF* he comments approvingly on many principles in both transcendental and absolute idealism:

Now suppose Hegel had claimed merely that we know the world and that it is in part contradictory (and perhaps that it must be so, even if only for us to be able to know it). Suppose, moreover, that Kant, for his part, had maintained that we do not know all of the world (or at the very most we know that we do so) and that human powers are at least potentially limited. Then their respective positions would have been negotiably compatible, and indeed arguably acceptable. If, further, neither had fallen sway to the conceptual realist aspiration and thought to ground the conditioned in terms of the unconditioned; and at the same time they had rejected an empirical realist account of embodied, finite being (which Hegel, no less than Kant, accepts) – then their positions would have approximated those of critical realism.

(Bhaskar 1993a: 121)

That is, Hegel should have confined himself to saying that human consciousness is able to apprehend the world and that it has a contradictory nature rather than insisting that everything must be the product of the mind's alienation from itself. He should also have avoided the errors of conceptual realism (i.e. he should not have tried to ground his a priori realist metaphysics in absolute idealism) because these errors lead straight to the supreme enemy of sustainable and coherent realism, namely empirical realism. Had he done so then we have the basis for a workable realist dialectics. And if Kant had not come up with the

very anthropocentric object-for-us and had also avoided the conceptual realism that resulted, then his transcendentalism would have been compatible with TR (as we saw in detail in the last chapter). This is an important passage in *DPF* because it captures the intellectual debt that Bhaskar owes to these giants of German philosophy, a debt that I have been trying to acknowledge and explicate in this book so far. But despite how close Kant and Hegel are to each other and, moreover, to CR and DCR at the end of the day, their elaborate and quite brilliant systems are still glorified forms of empirical realism.

What is the missing ingredient? How do we bridge this seemingly small but also (paradoxically) infuriatingly massive gulf between Kant and Hegel's empirical realisms as they stand now and the sustainable realisms that they have the potential to become? The answer, I want to suggest, lies elsewhere in the German tradition of *critique* – in the dialectical materialism of Karl Marx and Friedrich Engels. We will see in the next chapter that Marxian dialectical materialism<sup>21</sup> represents the realisation (as it were) of the most useful parts of the Kantian and Hegelian systems. I will develop my argument that with Hegelian dialectical realism we have at least the methodological principles of a consistent ontological dialectical realism. But they can only be consistently maintained within the parameters of a wider materialism, which is underdeveloped in Bhaskar's earlier writings and outwardly rejected in his recent spiritual turn. My argument is that this wider materialism is only possible via important Kantian epistemology regarding how the mind appropriates the object. It is to this examination of the Kantian and Hegelian methods at work in dialectical materialism that we must now turn.

# 5 Marx and Engels

## 5.1 Introduction

### 5.1.1 *General introduction*

In the last two chapters we have seen how Bhaskarian realism has grown out of important aspects of Kantian and Hegelian philosophy. The general trend that has been emerging is that Bhaskar's strengths have been when he grounds these aspects in a broadly materialist worldview. In this chapter I contend that a similar intellectual debt to these giants of German philosophy is owed by Marx and Engels but, unlike Bhaskar, their use of Kantian and Hegelian methodologies contains a more consistent materialism and consequently a more cogent realism. First of all, we will examine Marx and Engels's relation to Hegel, which takes the form of a weak a priori transformation of Hegelian dialectics. The insights we get into this are primarily provided by Engels. This will be the main focus of section 5.2. We will see that with Engels we get the deduction (using weak apriorism) of an intrarelated emergent materialist totality within which function various strata including the human social world. With Marx we get further insights into this worldview with his philosophy of internal relations. In section 5.3 we will see that Bertell Ollman's (Ollman 1977; 2003) attribution to Marx of such a philosophy provides the necessary analytical tools in order to grasp the latter's understanding of the social world. In section 5.4, I argue that Marx's philosophy of internal relations contains implicit Kantian principles regarding the relation between concept formation and the object-in-itself, which is essential to the materialist transformation of Hegelian dialectics to which a philosophy of internality is rooted. Having accomplished such an innovative use of certain aspects of Kantian and Hegelian methodology, I hope to show how Marx and Engels can successfully construct a philosophy of science that avoids the epistemic and ontic errors we have seen afflict Kant and Hegel.

## 5.2 Engels and the materialisation of Hegel's dialectic of internal contradictions

### 5.2.1 *Engels and Hegelian dialectics*

Marxian dialectics involves taking the methodological principles that lie at the heart of the Hegelian system and divesting them of their energising idealism. We saw in the last chapter that Hegel's dialectical realism was animated by an underlying ontological idealism. The material world, which provides the subject matter for both scientific inquiry and phenomenological experience, was seen as in essence an externalisation of the Idea, the inexorable process toward reunification that provided matter with its developmental logic and rationale. By contrast, Marxian philosophy of science locates the dynamic of the dialectic within material processes themselves. In short, the dialectic was divested of its 'mysticism' and seen to inhere exclusively within the material world, both natural and social. As Engels argues regarding his and Marx's method:

in nature, amid the welter of innumerable changes, the same dialectical laws of motion force their way through as those which in history govern the apparent fortuitousness of events; the same laws which similarly form the thread running through the history of the development of human thought and gradually rise to consciousness in thinking man; the laws which Hegel first developed in all-embracing but mystic form, and which we made it one of our aims to strip of the mystic form and to bring clearly before the mind in their complete simplicity and universality.

(Engels 1977: 16)

This 'demyſtification' of the Hegelian system is carried out by undermining the strong apriorism, which we saw in the last chapter formed the backbone of Hegel's phenomenological realism. As we saw, in works such as the *SL* and the *EL*, 'we have the application of these schemata or logical categories to nature: the philosophy of nature; and finally their application to the realm of man, which Hegel calls the philosophy of mind' (Engels 1977: 50). We saw that this amounted to the postulation by Hegel that materiality was a product of and emergent from the Idea when thought transcends its own unity in soul by externalising its corporeality. But Engels wishes to present an alternative dialectical system in which consciousness is not seen as given, pre-existing matter, but rather is emergent *from* materiality or, as he says, is 'a product of nature, which has developed in and along with its environment' (Engels 1977: 50-1).

To be sure, Engels remains true to the basic Hegelian principle that



material objects are governed by processes of internal contradiction and tension. As we saw in the last chapter, phenomenological realism was possible by virtue of the human sensible capacity to take basic (protoconceptual) cognisance of the underlying real rationalistic patterns of behaviour of elemental matter. This rationalism energises processes of individuation of objects against their elemental background and so generates internal tensions within objects, as we discovered in subsection 4.3.3. That is, individual material objects existed in a necessary asymmetrical dialectical interconnection with the rationalistic elemental nature from which they are struggling to distinguish themselves. I mentioned Hegel's example of the tension between air and organic and inorganic individual bodies with this element acting as a corrosive influence on the latter. At all points, as we saw, these internal dialectical contradictions within objects are governed by rationality and so, ultimately, the concept. Engels agreed with Hegel that everything was animated by internal dialectical contradictions but wanted to provide the governing force animating and directing this dialectic in materiality itself, in accordance with his wider interest in 'demystifying' Hegel's system. This provided the basis for his own dialectical philosophy of internality employing key Hegelian principles but suitably divested of the Idea. These were the *transformation of quantity into quality* (hereafter TQQ), the *interpenetration of opposites* (hereafter IPO) and the *negation of the negation* (hereafter NN).

Now, we have already touched upon a possible materialist analysis of Hegelian dialectics in section 4.5 where I outlined how Bhaskarian dialectics in general and heterological processes in particular provide us with the framework for a materialist developmental and evolutionary dynamic. I argued that locating such a dynamic within materiality itself avoided subjectivistic errors associated with the theistic and teleological implications of Hegel's insistence that it was to be found within the Idea. It is necessary to develop this further with reference to Engels's extensive formulation of a theoretical system that is founded on precisely this type of amendment of dialectical principles. If we look at the following passage from *Anti-Dühring* (AD; 1878) we see Engels establishing himself as a dialectician:

so long as we consider things as at rest and life-less, each one by itself, alongside and after each other, we do not run up against any contradictions in them . . . Inside the limits of this sphere of observation we can get along on the basis of the usual, metaphysical mode of thought. But . . . as soon as we consider things in their motion, their change, their life, their reciprocal influence on one another . . . we immediately become involved in contradictions. Motion itself is a contradiction.

(Engels 1977: 148)

When he says the 'metaphysical mode of thought' he is clearly undertaking the same critique we saw Hegel direct towards non-dialectical philosophy, which in *Dialectics of Nature* (DN; 1934) posits 'the absolute immutability of nature' (Engels 1974: 24), and so immediately we can see Engels stake out his territory alongside Hegel and against metaphysics.

In keeping with his elimination of the Idea as the powerhouse of the dialectic, however, Engels departs from an important Hegelian principle. We saw in the last chapter that, although Hegel identified an inner dynamical rationality of change in nature, at no point did we uncover evidence that he wanted to attribute to it a specifically evolutionary logic. To be sure, the natural world was governed by internal dialectics of tension and individuation in a teleological process. As we saw in subsection 4.2.2, Hegel's conceptual ontology of nature involved a linear account of materiality as a necessary consequence of the Idea. This in turn provided the backdrop to the protoconceptuality of nature (outlined in subsection 4.3.1) and the strong apriorism (outlined in subsection 4.3.2) that was central to the phenomenological realist-idealist grasp of his natural philosophy. But Hegel reserved for the world of human consciousness the interpretation of dialectical processes as specifically *evolutionary*. It seemed that the out-working of the Idea in material reality meant that change in nature was continuous and eternal. In the *PON* he argues that the process of the Idea in nature is not to be understood temporally but rather in terms of the antithesis of temporality, namely the eternal (Hegel 1970a: §249, 212). And so the natural world has no actual beginning because it is the *necessary* product of the everlasting logical Idea. Thus, dialectical processes in nature are continuous and cyclical in that there is no sense of a development that can be discerned temporally. As Alison Stone says '[t]his . . . conception of how natural forms obey rational requirements has the important advantage of explaining why Hegel generally describes natural forms as actively changing into one another while also denying that they are temporally successive' (Stone 2005: 66).

As I have said, it is only in the sphere of human consciousness that we have the emergence of a stratum of reality subject to a specifically evolutionary teleology. This was an important distinction within Hegel's philosophy of science that Engels's materialist inversion of the dialectic collapsed. It was appropriate that Engels made this vital amendment to the dialectic given the massive scientific developments at the time in which he penned *DN*, *AD* and his other major work *Ludwig Feuerbach and the Outcome of Classical German Philosophy* (LF; 1888). He notes the discovery by Kant and Pierre Simon Laplace (1749–1827) that the universe was not static but subject to historical processes (Engels 1974: 26–7). Charles Darwin had discovered that changes in the organic world were not, as Hegel supposed, cyclical but were governed by an

evolutionary dynamic (Engels 1977: 33).<sup>1</sup> Such discoveries confirmed in Engels's mind that nature was subject to developmental and evolutionary laws which Hegel had restricted to the sphere of human spirit. These scientific discoveries revealed to Engels that evolutionary laws were at work in nature and he interpreted Darwinian science in particular as revealing that the human consciousness itself was a product of this developmental process. This immediately relocated the dynamical force of material change in materiality itself. That is, the emergence of what Hegel calls 'spirit' (human consciousness) is not evidence of the subjection of nature to the whims of some external idea but is the product of laws *intrinsic to nature-in-itself* (that is, materiality divested of conscious reason). It is in this way that we are to understand why, in Engels's dialectic but not in Hegel's, there is a fundamental continuity between dialectical laws in nature and society.

### 5.2.2 *Three laws of internal dialectics: transformation of quantity into quality, the negation of the negation and the interpenetration of opposites*

Accordingly, Engels is critical of Hegel's idealist treatment of the three laws central to his logical categories developed in the *EL*, namely TQQ, IPO and NN. He clearly alludes to the inherence of these laws within nature-in-itself when he criticises Hegel's attempt to make them products of the thought processes that were in reality subject to them. He argues that the 'mistake lies in the fact that these laws are foisted on nature and history as laws of thought, and not deduced from them . . .; the universe, willy-nilly, has to conform to a system of thought which itself is only the product of a definite stage of evolution of human thought . . . dialectical laws are [by contrast] real laws of development of nature' (Engels 1974: 62, 63). This is compatible with my discussion in subsection 4.4.2 that Hegel's insistence on the veridical character of basic sense experience (outlined in subsection 4.1.1) was constitutive of a *subject-object identity* between human phenomenal experience and real rationalistic processes in nature. In the above passage, it seems that Engels's comments that in this Hegel is guilty of a conformity of real processes to human thought have successfully undermined the realist credentials of the latter's idealism and anticipated some of my concerns in the last chapter.

We saw in our critique of Hegel that a rejection of a teleological dynamic was central both to undermining his realism and to the formulation of a materialist alternative. Again, Engels seems to have anticipated our concerns with his treatment of the TQQ, NN and IPO. Of the former, in *DN* he says that 'we can express this [law] by saying that in nature, in a manner exactly fixed for each individual case, qualitative changes can only occur by the quantitative addition or quantitative

subtraction of matter or motion' (Engels 1974: 63). In *AD* he says that 'at certain definite nodal points, the purely quantitative increase or decrease gives rise to a qualitative leap . . . where consequently quantity is transformed into quality' (Engels 1977: 61) and gives the example of the heating or cooling of water in which the 'definite nodal points' are the moments when it becomes a vapour or a solid respectively.

The NN states that the internal dialectical contradictions in an object lead to its transformation into its opposite, which is itself then negated. This is essentially the law at work in Hegel's logical categories. We saw in subsection 4.3.1 the paradoxical conditions of possibility of protoconceptual sense experience in the process of consciousness towards philosophical understanding of nature. Pre-conscious sensuousness represents the most primitive aspect of consciousness but one that captures the intrinsic rationality of nature, a unity that must be negated in the process of externality that is consciousness' long journey towards unity again in absolute spirit. The negation of the unity (the exclusion that is sensuous consciousness) is itself negated in absolute consciousness. And we saw in subsection 4.4.1 that a similar process of negation governed elemental transmutation in nature and individuation undergone by material bodies *in themselves* (i.e. they were not just a phenomenon of human apprehension of nature), minus, of course, the temporal evolutionary logic provided by absolute consciousness. We also saw in subsection 4.3.3 how Hegel believed that this doctrine of immanence contrasted with the, in his view, implicit empiricism of science in its positing change and development in objects as energised externally.

A good example of a materialist application of NN can be found with Marx's analysis of capitalism. In *CI* Marx uses NN in his idea about how economic systems dialectically, historically develop: 'capitalist production begets, with the inexorability of a law of Nature, its own negation. It is the negation of the negation' (Marx 1977a: 715). Immanent (i.e. internal) laws of capitalism are posited when he contends that '[t]his expropriation is accomplished by the action of the immanent laws of capitalistic production itself' (Marx 1977a: 714). The process of human history, Marx tells us, unfolds in accordance with the logic of NN – primitive communism is negated by private property in its various guises only to be negated by a higher form of communism. But, as Engels clarifies in *AD*, Marx applies the method divested of its Hegelian teleological character:

Marx does not intend to prove that the process is historically necessary. On the contrary: only after he has proved from history that in fact the process has partially already occurred, and partially must occur in the future, he in addition characterises it as a process which develops in accordance with a definite dialectical law. That is all.

(Engels 1977: 164)

In other words, Marx is applying a consistent materialist philosophy of science by positing that a particular socioeconomic form is subject to the NN only after it has been scientifically identified as an actual phenomenon. At no point does Marx draw on a strong a priori notion, in the manner of Hegel, which is supposed to energise the concrete processes that are governed by the NN. For Engels, the law of the negation of the negation is a

law of development of nature, history and thought; a law . . . which holds good in the animal and plant kingdoms, in geology, in mathematics, in history and in philosophy . . . When I say that all these processes are a negation of the negation, I bring them all together under this one law of motion, and for this very reason I leave out of account the specific peculiarities of each individual process. Dialectics, however, is nothing more than the science of the general laws of motion and development of nature, human society and thought.

(Engels 1977: 172)

The third law is IPO and involves the Hegelian idea that objects represent the unity of polar opposites as conditions of possibility of their existence. We saw in subsection 4.3.3 Hegel's criticism of empiricism in terms of its neglect of the dialectical interconnections between elements. We saw that in basic sense experience we apprehend the elements as dialectically interconnected with each other in the sense that there is constant transmutation of one into the other (e.g. water becomes air when it is boiled). That is, the condition of possibility of their development and particularisation is their development *out of each other*. We also saw how the condition of possibility of material bodies is their struggle to individuate themselves against their elemental background, which is intrinsically inclined to dissolve them. We thus have the interpenetration of the elemental and the particular as a condition of possibility of material bodies.

As Richard Norman (1980) has pointed out, Engels defines IPO as a particular instance of Hegel's TQQ but gives it a separate treatment 'since it is absolutely central to his general picture of the emergence of higher forms of motion out of lower' (Norman 1980: 159). Again, this is motivated by his desire to ground dialectical laws as a posteriori deductions from the latest scientific findings. For example, in lauding Darwin's achievements in biology Engels demonstrates how they necessitate abandoning the metaphysical tendency to treat natural phenomena as existentially separated objects energised from without. Darwin had demonstrated in his theory of evolution how drawing hard and fast lines between different species was fallacious. In *AD* Engels argues that Darwin had 'dealt the metaphysical conception of nature the heaviest blow by his proof that all organic beings, plants, animals, and

man himself are products of a process of evolution' (Engels 1977: 33). Immediately preceding this he says '[n]ature is the proof of dialectics, and it must be said for modern science that it has furnished this proof with very rich materials increasing daily, and thus has shown that, in the last resort, nature works dialectically and not metaphysically . . . but through a real historical evolution. In this connection Darwin must be named above all others' (Engels 1977: 33).

### 5.2.3 *Dialectical materialist laws and determinate contradictions*

The clear picture which emerges from the three dialectical laws (TQQ, NN, IPO) is that Engels holds to a rather grand picture of reality that is governed by materialist dialectical laws of change, development and evolution energised by a definite logic of internal contradiction. The optimum words are development and evolution through change. These are important because they immediately suggest that the dissolution and negation of objects that dialectics quite clearly involves should not be understood as involving the creation of, as it were, mere nothingness. Rather, negation and dissolution involve definite results; they are thus *determinate*. We have encountered this thinking before when we were examining the U-D-R schema that Hegel employed in his account of consciousness in subsection 4.4.3 and in the individuating processes material objects in nature undergo in their struggle with their elemental conditions of possibility. And so here again we see the Hegelian origins of an important aspect of Engels's system.

### 5.2.4 *Engels's philosophy of science as a materialist–realist 'weak' apriorism*

Despite Engels's debt to Hegel, as I have already mentioned, the materialist application to which he puts the dialectical system is divested of Hegel's strong apriorism. Rather, a priori propositions are deduced a posteriori on the basis of philosophical generalisations from the current state of the sciences. Dialectical materialism therefore does not offer its dialectical principles as 'axioms' from which concrete results are deduced; rather, the reverse is true (Sayers 1980: 21). In *LF* we get a valuable insight into Engels's thinking in this regard. The sciences of his time, as I said above, had identified the historical evolutionary dynamic of the material universe which was intrinsic within materiality itself. We saw in subsection 4.5.1 how such findings were ontologically significant for philosophy. And we saw in subsection 4.5.2 how this provides the basis for a consistent philosophical realism, according to which, in Bhaskar's words, 'what is apodeictically demonstrable is also *scientifically comprehensible*' (Bhaskar 1998: 6; italics mine). Engels's



sensitivity to this requirement leads him to criticise the mechanistic character of popular eighteenth-century materialism as being increasingly anachronistic in the face of such scientific achievements:

The materialism of the last century was predominantly mechanical, because at that time, of all the natural sciences, mechanics . . . had come to a definite close. Chemistry at that time existed only in its infantile, phlogistic form. Biology still lay in its swaddling clothes; vegetable and animal organisms had been only roughly examined and were explained as the result of purely mechanical causes . . . This exclusive application of the standards of mechanics to processes of a chemical and organic nature – in which processes, it is true, the laws of mechanics are also valid, but are pushed into the background by other and higher laws – constitutes a specific but at that time inevitable limitation of classical French materialism.

(Engels 1988: 26–7)

These philosophical shortcomings were ‘at that time inevitable’ because, Engels contends, materialism reflected the scientific tendency of supposing that the universe was subject to merely cyclical laws of motion and change:

The second specific limitation of this materialism lay in its inability to comprehend the universe as a process – as matter developing in an historical process. This was in accordance with the level of the natural science of that time, and with the metaphysical, i.e. anti-dialectical manner of philosophizing connected with it. Nature, it was known, was in constant motion. But according to the ideas of that time, this motion turned eternally in a circle and therefore never moved from the spot; it produced the same results over and over again. This conception was at the time inevitable. The Kantian theory of the origin of the solar system had been put forward but recently and was regarded merely as a curiosity. The history of the development of the earth, geology, was still totally unknown, and the conception that the animate natural beings of today are the result of a long sequence of development from the simple to the complex could not at that time scientifically be put forward at all. The unhistorical view of nature was therefore inevitable.

(Engels 1988: 27)

The presence of the same error in Hegel’s philosophy of nature is less understandable because he was writing at a time when knowledge was beginning to emerge which suggested that development occurred in *time* as well as in space thereby introducing a *temporal evolutionary* dynamic to the natural world:



We have less reason to reproach the philosophers of the eighteenth century on this account, since the same thing is found in Hegel. According to him, nature, as a mere 'alienation' of the idea, is incapable of development in time – capable only of extending its manifoldness in space, so that it displays simultaneously and alongside of one another all the stages of development comprised in it; and is condemned to an eternal repetition of the same process. This absurdity of a development in space, but outside of time – the fundamental condition of all development – Hegel imposes upon nature just at the very time when geology, embryology, the physiology of plants and animals, and organic chemistry were being built-up, and when everywhere on the basis of these new sciences brilliant foreshadowings of the later theory of evolution were appearing.

(Engels 1988: 27)

That Hegel is said to have imposed on to nature his apriorism, whereas Engels *deduces* his *from* the study of nature, is significant because it represents the necessarily *weak* character of materialist apriorism as opposed to the strong version we have seen animate Hegel's system.<sup>2</sup> But, as I briefly touched upon in the last chapter,<sup>3</sup> John Burbidge (1996) is a Hegel scholar who insisted that in the *PON* we see evidence of a weak a priori method. Although I have already indicated at length that I think Stone's strong a priori interpretation is more convincing, the potential similarities in methodology between Burbidge's Hegel and Engels make it instructive to discuss briefly the weak a priori method as it is presented by Burbidge. It should give us valuable insights into Engels's philosophy of nature. We will now see that Burbidge's account falls into difficulties because it presupposes Hegel's implicit Humean account of science, but that because Engels operates the system from within the parameters of realist-materialist and emergentist ontology of nature, his account is consistent and coherent.

Burbidge contends that the purely a priori logical categories of the Hegelian system we saw in the last chapter do not actually figure highly in the *PON* but are to be found in the *EL* and *SL*. In the *PON* Hegel seems to be more interested in what Burbidge calls 'natural' categories. These differ from logical categories in that they are not developed using purely a priori reasoning and then used to reinterpret empirical results but are developed *from* those results. This creates a clear distinction between logical thought and the philosophy of nature 'each with its own systematic method' (Burbidge 1996: 23). Hegel apparently modifies the weak a priori method so that a priori categories do not so much reorganise and reinterpret scientific concepts but are actually formed via a process of deduction from them. The natural categories are needed because Hegel apparently realises in the *PON* that the logical

categories can only ever receive an *imperfect* instantiation in scientific understanding of the natural world. In particular, in sense experience chemical processes seem to involve combination and separation that should not happen according to the logical category. Burbidge thinks that the problem for the logical categories arises in the context of the U-D-R movement, that is, when they undertake their task to reorganise and restructure empirical concepts (Burbidge 1996: 114). Speculative reason often generates categories which, in addition to the logical ones, are formed by reflection on empirical results. And so we have a priori concepts that are also a posteriori because they have been produced by a philosophical deduction from empirical science. In this analysis, '[r]ather than being the presupposition of the philosophy of nature . . . in Hegel's mature system absolute spirit would be its final consummation' (Burbidge 1996: 24). Given this, Hegel avoids the problem of epistemic absolutism because there is never an exact correspondence between the logical categories and empirical knowledge (Burbidge 1996: 162). Burbidge therefore seems to think that by redefining the logical categories as natural ones it is more likely that they can sustain universality/necessity while avoiding epistemic absolutism.

Stone, as part of her critique of the weak a priori method generally, insists that linking natural categories so closely to a posteriori science means that they cannot possibly be a priori in any meaningful way. She argues that:

categories, like any items of knowledge, are a priori or a posteriori in virtue of how they are justified. Since natural categories are justified through their derivation from the empirical materials that they unify, they must be a posteriori. They may *appear* a priori when viewed in abstraction from their empirical context of justification, but really their justification renders them a posteriori.

(Stone 2005: 177, n. 35)

After exposing how apriorism cannot be sustained in such conditions she then goes on to reassure Burbidge that despite the loss of apriorism his aposteriorism can still work. She claims that 'Burbidge's work develops an alternative, a posteriori, interpretation of the *Philosophy of Nature* which is philosophically viable . . . [in that it] allows Hegel to learn from science while acknowledging the fallibility of its claims' (Stone 2005: 19). I agree with Stone that Burbidge's weak a priori method probably does not capture Hegel's intentions in the *PON*. I disagree with her, however, in that the philosophical principles at work in Burbidge's method are sound in that it is perfectly possible to construct a workable apriorism from a posteriori deduction. The problems arise for Burbidge in his attempt to operate weak apriorism from within a Humean account of causation.

I agree that a priori categories that claim natural and universal necessity, when deduced from the contingent results of science, will be open to possible revision and amendment as scientific knowledge changes and develops. As Stone argues, natural categories are no different from logical ones in the sense that they emerge through a developmental process and so 'philosophical thought about nature can be no less processual than logical thought in general' (Stone 2005: 18). But to say that categories deduced from changing scientific knowledge cannot thereby convincingly be called a priori at all does not automatically follow. Stone is right to point out that in Burbidge's case apriorism is effectively dissolved into aposteriorism but she seems to think that this is an inevitable consequence of trying to deduce the former from the latter. I want to present a slightly different reason for why Burbidge's weak apriorism fails. It is not his deduction of a priori categories from a posteriori concepts *as such* that creates difficulties for him but rather what form those categories take. As we saw in subsection 1.2.4 a priori deductions from a posteriori concepts formulate a priori categories that carry cogent natural necessity/universality on the condition that these categories do not presuppose a *Humean account of causality*. If they do, then, and only then, are they effectively collapsed into aposteriorism and we are firmly in the territory of the epistemic error of deducing an a priori account of the world as made up of constant conjunctions of events leading to empirical realism. This is because, as we know, constant conjunctions are purely an act of scientific closure. And we also know that this involves the loss of intransitivity and transfactuality, what we saw in subsection 1.2.3 was the error of subjectivity. Thus, in Burbidge's interpretation of Hegel we see the loss of intransitive and transfactual nature in a way that reflects the epistemic fallacy. There is nothing wrong in principle with the basic contention at the heart of Burbidge's account, namely that it is possible to deduce philosophically cogent a priori categories (i.e. categories that carry natural necessity) a posteriori. In fact the pre-spiritualist Bhaskar, as we know, insists that such a deductive method is central to philosophical cogency.<sup>4</sup> As far as the principle of a priori deductivism is concerned it seems to me that Burbidge's method is broadly consistent with Bhaskar's own. As we saw in subsection 1.2.4, the transcendental method of a priori deduction presupposes a posteriori retroductive techniques.

Burbidge's account therefore protects itself from the ontic fallacy by ensuring that any change in the character of a priori categories is determined by scientific concepts rather than via a Kuhnian-style ontic revolution that is entailed, for example, in Gerd Buchdahl's (1993) weak a priori interpretation of Hegel.<sup>5</sup> When we consider the coherence of his interpretation of Hegel's method in relation to epistemic matters, however, the same cannot be said. We know that a priori deductive process

is important in the formation of categories that sustain transfactual natural necessity. And so a cogent a priori deductive process cannot presuppose a Humean account of causality because, as we have seen, to do so would involve extrapolating from empirical results, achieved in closed conditions, that those results were characteristic of the behaviour of objects in nature. Unfortunately, this is exactly what Burbidge's account involves because he thinks that in the *PON* Hegel employs a 'thoroughgoing empirical approach' (Burbidge 1996: 207), thereby allowing 'an alien nature to be itself through a genuine empiricism' (Burbidge 1996: 211). He presents us with the erroneous interpretation of Hegelian philosophy of nature as supposing that the natural world has a character that makes it susceptible to being adequately captured in empirical science. In essence, Burbidge has attempted to reinterpret Hegel's categories in the *PON* as exemplifying non-logical natural categories through a conscious desire to protect the latter from epistemic absolutism in the form of the ontic fallacy. The outcome is that the reverse error is implicit because of Burbidge's inability to restructure these 'natural' categories sufficiently so as to avoid epistemic absolutism via the epistemic fallacy.

It seems to me that Engels's materialist categories of the natural world are similar to those Burbidge attributes to Hegel in the sense that they represent the attempt to link a comprehensive theory of immanent dialectical change and development with the scientific record thereby grounding a priori philosophy firmly within the parameters of material science. I think that this explains Engels's bemusement, in the quotation from *LF* above, with Hegel's apriorism, which posited a teleological non-evolutionary natural world during a time of tremendous scientific advances that effectively rubbished these claims. It is because Hegel's apriorism was, despite Burbidge's claims to the contrary, of the strong variety. So Engels endorses the strong a priori interpretation of Hegelian philosophy of science but wishes to operate its important dialectical principles within the framework of a materialist weak apriorism (that is, a weak apriorism divested of its status as the instantiation, imperfect or otherwise, of logical categories). Strong apriorism was characteristic of the philosophy of Eugen Dühring (1833–1921), the academic who was Engels's main subject of criticism in *AD*. In contrast to Dühring's 'logical schemata . . . what we are dealing with here is solely forms of being, of the external world, and these forms can never be created and derived by thought out of itself, but only from the external world . . . the principles are not the starting point of the investigation, but its final result; they are not applied to nature and human history, but abstracted from them' (Engels 1977: 50). Elsewhere in the text he states clearly that modern (i.e. dialectical) materialism must reflect the discovery that the universe has a natural history:

[m]odern materialism embraces the most recent discoveries of natural science, according to which nature also has its history in time, the celestial bodies, like the organic species that, under favourable conditions, also people them, being born and perishing . . . In both cases modern materialism is essentially dialectic, and no longer needs any philosophy standing above the other sciences.

(Engels 1977: 36)

Philosophy, in other words, should not impose itself on the sciences but instead underlabours for them.

Moreover, we can also detect from the above *LF* quotations the basic premises which, I will now argue, enable Engels to construct a weak apriorism analogous to Burbidge's but one that avoids its epistemic errors. These premises are a dialectical stratified–emergentist anti-empiricist account of science. Specifically, such apriorism which replaces eighteenth-century materialism is required because laws of mechanics are 'pushed into the background by other and higher laws'. In other words, the maturation of biology, geology and astrophysics out of their 'swaddling clothes' necessitated a philosophical ontology that reflected our emerging understanding of the world as increasingly stratified, emergent and complex.

### 5.2.5 *Engelsian internal stratification–emergence and the historicisation of materiality*

Ted Benton, in his paper on the relation between Engels's philosophy and the natural sciences (1979), has interpreted Engels's critique of mechanical materialism as representing:

a kind of natural scientific ontology of nature as a unified, though internally structured and differentiated whole . . . [Engels] proposes a hierarchy of 'forms of motion' with transitions to one another . . . The universe is a 'system', in the sense of 'an interconnected totality of bodies' in continuous interaction with one another. The different domains of the universe are constituted by levels in the hierarchy of complexity of forms of motion . . . and form 'the basis for the separation' of the different sciences.

(Benton 1979: 121–2)

Benton suggests that Engelsian ontology involves the conception of reality as an internally differentiated totality, a 'hierarchy of complexity of forms of motion'. It seems that this interpretation accords with my characterisation of it as a form of weak apriorism:

Engels's ontology is the product of philosophical reflection on what is presupposed by the recent development of the sciences.

The convergence, the realignment, of whole fields of theory which had previously developed separately . . . is unintelligible . . . unless these different fields of theoretical discourse are apprehended as so many different attempts at knowledge of a unitary though internally differentiated, natural universe. This unity of nature is an essential precondition for convergence of the sciences, for the repeated discovery of 'interconnections', whilst the differentiation of nature is implied by the discreteness and uneven historical development of the different sciences.

(Benton 1979: 125)

If my reading of Benton is correct, then Engels can be said to more or less hold to the methodology outlined by Burbidge. But if there is a similarity, then there is also a crucial distinction, and it is that Benton finds space in Engels's system for the teleological (i.e. the non-natural) categories that do not feature heavily in Burbidge's Hegelian methodology. It seems that, despite Engels's use of the weak a priori method to deduce emergent and stratified reality with dialectical and developmental laws, Benton does not share my interpretation that they are immanent.

Engelsian teleology apparently takes the form, Benton tells us, of an extension of Hegel's doctrine of human societal teleological evolutionism into nature. This means that Engels's historical evolutionism is evidence of his constructing a form of dialectical teleological monism which, as we saw in the last chapter, was absent from Hegel's strong a priori system applied to nature. To be more precise, he is supposedly contending that emergence of higher from lower order phenomena is governed by a single dialectical law which functions at *all* levels of reality and is subject to a form of quasi-teleological temporal evolution. And so Engels is taking the evolutionary methodology of Hegel's absolute spirit and applying it to nature to historicise what Hegel had deliberately left subject to the ahistorical laws of merely cyclical motion. The discovery of nature as apparently governed by emergent and stratifying processes made a simple materialist inversion of Hegelian temporal evolutionism, now applied to the natural as well as the social world, an appropriate theory to explain its development:

the introduction into his [Engels's] characterization of the historical process of the notion of levels of complexity also suggests a historicization of the problem of 'emergence' . . . Historicity in nature is, in other words, the emergence, in temporal succession, of new levels of complexity in forms of motion . . . The domain of nature with which each science deals represents not only a distinct level of complexity of motion, but also a definite stage in the historical evolution of the universe. Historicity in this sense, as much as motion itself, must be regarded as an essential characteristic of nature

– beings are to be thought of as constantly in process of change, of coming into being and passing away. This is true not just of individual beings (for example dissociation of organic beings on death) but also of whole domains of nature (for example the origin of life out of inorganic processes, and its eventual demise). Here, then, mixed up with a philosophically dubious quasi-teleological notion of historicity as progressive development, there is also an attempt to confront the problem of the emergence of new forms and structures as a specifically historical problem.

(Benton 1979: 124)

It follows from this interpretation that Engels undertakes an 'indifferent application of the dialectical laws of the transition of quantity into quality, and negation of the negation' (Benton 1979: 124) to the emergence of new forms in natural as well as social histories so that they share a '*common* historicity' (Benton 1979: 124).

That I object to this interpretation of Engels's should not surprise us given what I have already said above about the crucial distinction between evolutionism and teleologism. As Sean Creaven has recently noted (Creaven 2000: 36–7), Benton's attribution of teleologism to Engels rests on little more than a quite erroneous assumption that the historical directionality and evolutionism in the emergence and movement of stratified layers of reality constitutes a straightforward 'dubious quasi-teleological notion of historicity as progressive development'. If Hegel's philosophy of nature involves a non-evolutional teleologism by virtue of his strong a priori contention of the centrality of the Idea to the natural world (which thereby energises cyclical change), then it is perfectly possible for Engelsian dialectics, divested of strong apriorism, to construct a non-teleological form of evolutionism. And we have already seen that this is accomplished by positing laws of change and development as internal to nature-in-itself.

The deduction of a priori categories of emergence and stratification which implies directionality and temporality to natural and social forms is a strong feature of Bhaskar's CN as we have seen in subsection 1.3.1 with his conception of SEPM. And in subsection 2.2.1 we saw Bhaskar dialecticise SEPM by arguing that processes of emergence constituted the creation of new causally efficacious matter (autopoietic). Crucially, we also saw that the dialecticisation of SEPM involved taking what were merely abstract a priori categories of CN and *historicising* them. In this way, we saw Bhaskar animate SEPM with absencing processes. Only when Bhaskar, along with others, decided to depart from the (materialist) territory of a consistent philosophical realism and flirt with spiritualism did teleology begin to feature in the DCR system.<sup>6</sup> This notwithstanding, as we have seen in subsection 2.2.1 and also in subsection 4.5.2, directionality and evolutionism are governed



by *immanent bipolarity* within the material world, a principle which we see at work with Engelsian philosophy. As Creaven puts it:

In a sense . . . Engels is right to suggest that the differentiated elements of nature (physico-chemical, biological, human-social, etc.) have a common historicity. For all are 'phases' in the development of matter through ascending levels of complexity, and all are composed of those 'basic' elements which ontologically and historically presuppose their existence. Yet it is important to be clear that there is nothing in this conception which implies that this 'common historicity' of nature is an undifferentiated or unstratified one, or that the evolutionary emergence of higher from lower domains of nature was necessary or preordained.

(Creaven 2000: 37)

In fact, Engels's conception of an internally differentiated, stratified and emergent universe sharing a non-teleological common historicity is merely a function of his weak a priori materialist ontology. I have already argued in the last chapter about how cogent apriorism hinges on the possibility of leaving it open to possible amendment when advances in the scientific record require it and we have seen above how Engels is sensitive to this requirement. Darwinian biology uncovered a non-teleological directional natural history. Advances in astrobiology suggest that organic life is more than likely universal in the cosmos given the logical outcome of known chemical laws operative on planets (of which more and more are discovered every month) and, as we shall see in a moment, Marxian sociology has revealed directionality in human social, economic and political change. In *LF* Engels makes it absolutely clear how the scientific discovery of the world governed by immanent dialectical laws of interconnected processes necessitates a philosophical system that is sensitive to scientific discoveries; one that thus has more than a striking similarity to our model for a workable weak apriorism:

the world is not to be comprehended as a complex of ready-made things, but as a complex of processes, in which things apparently stable no less than their mind-images in our heads, the concepts, go through an uninterrupted change of coming into being and passing away, in which, in spite of all the seeming accidents and of all temporary retrogression, a progressive development asserts itself in the end . . . If investigation proceeds from this standpoint, *the demand for final solutions and eternal truths ceases once and for all; one is always conscious of the necessary limitation of all acquired knowledge, of the fact that it is conditioned by the circumstances of the time.*

(Engels 1988: 44–5; italics mine)

If Benton was committed to the logic of his correct attribution to the Engelsian system of a weak apriorism, then he would not have made the (largely unsubstantiated) accusation that Engels's ontology entailed a teleological conception of materiality's historicity. It seems to me that Benton is confusing Engels's quite legitimate and, in accordance with the requirements of cogent weak apriorism, required deduction of an evolutionary dynamic to the newly identified emergent and stratified natural and social worlds with a crude or 'indifferent' application of Hegelian teleological categories to all facets of materiality.

On the basis of his materialist weak apriorism Engels therefore posits a differentiated and stratified natural and social world sharing a common historicity animated by the same internal (immanent) historical dialectical laws. But by virtue of their internal differentiation these laws do not take identical forms in the natural and social worlds. Engels is quite clear about this in *DN*:

In [human] history, motion through opposites is most markedly exhibited in all critical epochs of the foremost peoples. At such moments a people has only the choice between the two horns of a dilemma: 'either-or!' . . . a return to the old reaction in an intensified form, or continuance of the revolution . . . [In nature] *Hard and fast lines* are incompatible with the theory of evolution . . . 'Either-or' becomes more and more inadequate . . . For a stage in the outlook on nature where all differences become merged in intermediate steps, and all opposites pass into one another through intermediate links, the old metaphysical method of thought no longer suffices. Dialectics, which likewise knows no hard and fast lines, no unconditional, universally valid 'either-or' and which bridges the fixed metaphysical differences . . . and reconciles the opposites, is the sole method of thought appropriate in the highest degree to this stage.

(Engels 1974: 212–13)

And in the quotation above from *AD* in relation to the NN Engels argued that, 'When I say that all these processes are a negation of the negation, I bring them all together under this one law of motion, and for this very reason I leave out of account the specific peculiarities of each individual process' (Engels 1977: 172). In *LF* he gives us an example of why we need to be sensitive to the specific particularities that distinguish natural from social dialectics – in the latter the human mind can apply them consciously while the same is not true in the former. He describes materialist dialectics as:

the general laws of motion – two sets of laws which are identical in substance, but differ in their expression in so far as the human

mind can apply them consciously, while in nature and also up to now for the most part in human history, these laws assert themselves unconsciously in the form of external necessity in the midst of an endless series of seeming accidents.

(Engels 1988: 44)

As John Rees (1998) and Sean Sayers (1996) have argued, dialectical laws of different forms prevail not only between nature and society but also within nature itself (Rees 1998: 76; Sayers 1996: 161). This is because the irreducibility of strata within nature (biological, chemical, etc.) entail, as part of their irreducibility, differing applications of 'the general laws of motion'.

An application of this dialectical materialist weak apriorism to a specific stratum of reality can be seen in Marx's social theory. Bertell Ollman (1977; 2003) has undertaken extremely important work in uncovering what he calls Marx's *philosophy of internal relations* within which I will argue a materialist emergentist-stratified weak apriorism and immanent bipolarity are operating. The same methodological principles that we have just seen Engels apply to material reality as a whole are used by Marx to explain the social world. In examining Marx in this regard we will not just get insights into how the Marxian weak apriorism is useful in analysing social phenomena but, in section 5.4, we will also uncover some important evidence in Marx's thinking that this philosophy of science is ultimately dependent on some important aspects of Hegelian and Kantian epistemological principles.

### 5.3 Marx's weak apriorism I: the dialectics of abstraction and internal relations

#### 5.3.1 Marx's '*philosophy of internal relations*'

In essence, Ollman presents an interpretation of Marx's method of social analysis in which its objects and categories are seen as *relations* rather than just as discrete individual things. It is objects' relations to each other that provide each one's condition of possibility of existence thereby overcoming the commonsense and pre-dialectical metaphysical conception of them as linked only externally and contingently. Rather, objects' relations to each other are constitutive of what they are and so are necessary:

The relation is the minimum for all units in Marx's conception of social reality. This is really the nub of our difficulty in understanding Marxism, whose subject matter is not simply society but society conceived of 'relationally'. Capital, labor, value, commodity etc.,

are all grasped as relations, containing in themselves as integral elements of what they are, those parts with which we tend to see them externally tied . . . According to the commonsense view, a social factor is taken to be logically independent of other social factors to which it is related. The ties between them are contingent rather than necessary; they could be something very different without affecting the vital character of the factors involved . . . In Marx's view, such relations are internal to each factor (*they are ontological relations*), so that when an important one alters, the factor itself alters; it becomes something else.

(Ollman 1977: 14, 15; 2003: 25–6; italics mine)

To say that an object is an ontological relation is to say that the object *itself* is a relation between and with other things. In other words, within the meaning of a particular concept or category is implicitly contained, as a condition of possibility of its existence, its relation to the other components which together make up the totality or whole (i.e. the social relation). It is therefore an *abstract expression* of a totalised, concrete, interconnected social relation. We have already encountered this type of thinking before when we were introducing Bhaskar's DCR. For example, towards the end of subsection 2.2.3 we saw that the study of rhythemics must presuppose a *taxonomic realism* – the contention that phenomena such as a person's identity are an internal causal relationship (1M) between many rhythemics (2E). Various abstract CR categories must be understood as having emergent status and causal powers by virtue of their immersion in these intra-acting totalised conditions. We also saw in subsection 2.3.1 how this intrarelation between rhythmical processes at 3L is known as *ontological extensionalism*.

In *A Contribution to the Critique of Political Economy* (CCPE; 1859), Marx certainly suggests as much when he says that 'the simplest economic category, say, exchange-value, implies the existence of population, a population moreover which produces under definite conditions, as well as a distinct type of family, or community, or State, etc. Exchange-value cannot exist except as an abstract *unilateral* relation of an already given concrete and living aggregate' (Marx 1977b: 206). Another good example is the concept 'capital'. In the *Communist Manifesto* (CM; 1848) Marx and Engels describe capital as 'that kind of property which exploits wage-labour, and which cannot increase except on condition of getting a new supply of wage-labour for fresh exploitation' (Marx and Engels 1986: 48). This relation in which capital depends on wage-labour for its existence is therefore a *function of capital itself* and is an essential component of the meaning of the word 'capital'. Ollman demonstrates how this word is extended to include workers ('variable capital'), capitalists, the means of production, that which the workers produce, money, and commodities (Ollman 1977: 13; 2003: 24). All of these factors are thus essential components of a single structure. As

Ollman puts it, 'Marx grasped each political-economic concept as a component of society itself . . . ; that it is intimately linked with other social components to form a particular structure; and that this whole, or at least its more significant parts, is expressed in the concept itself . . . in its very meaning' (Ollman 1977: 13; 2003: 24). In this way, Marx is said to refer to the social object in a dual sense – as a social factor *itself* (what Ollman calls a *relation* – that is, all social units, concepts, etc. that are intertwined in relations) and as a *connection between* different social factors (or a *relation*) (Ollman 1977: 16; 2003: 26). Marx is positing an organic *inneraction* (inner connection) as intrinsic to all concepts and categories. This is crucial because what Marx is doing here, according to Ollman, is redescribing the relations of interaction and interconnection between central economic categories such as exchange, distribution, production, consumption, etc. as, properly speaking, *inner* relations thereby precluding describing one as the cause or effect of any other. To do so presupposes thinking of them as only externally related. It is only in specific contexts and when we are looking at a particular link in the interactions of categories in specific instances that singling out this or that category as determinant becomes a legitimate method of analysis. As Ollman says, 'we find as internally related parts of whatever is said to be the cause or determining agent everything that is said to be a condition, and vice-versa . . . to single out any aspect as determining can only be a way of emphasizing a particular link in the problem under consideration' (Ollman 1977: 17; 2003: 27). This method of approaching important socioeconomic categories at once protects Marx's system from crude reductionism because:

instead of seeking a strict causal tie between the mode of production and other institutions and practices of society which precludes complex social interaction, we must begin by accepting the existence of this interaction and then seek out the ways in which Marx believes that the effects proceeding from the mode of production and other economic factors (narrowly understood) are more important. Such interaction, as we have seen, is a necessary part of each social Relation.

(Ollman 1977: 25; 2003: 34)

The whole or totality is governed by processes of change. This is because, in Ollman's analysis, each social factor is internally related to its own past and future forms (Ollman 1977: 17–18; 2003: 28). The Hegelian notion of spatiotemporal processes of becoming is relevant here. But there is a crucial difference and we can locate it in the weak materialist apriorism that Marx employs. We know that Hegel's spatiotemporal dialectic is energised by the Idea in accordance with his strong apriorism. Marx's, on the other hand, is grounded in deduction from the current state of the empirical sciences, and we have seen

that this is characteristic of Engelsian dialectics. To be more precise, induction provides the basis from which a priori conceptualisations are deduced. In this way, the laws of internal relations can only exist as spatiotemporal relations that already have an empirical existence. What this means is simple. If Marx adopts a properly weak apriorism, then changes and developments intrinsic to social categories can be only the realisation of an *already existent* potentiality within them, or, as Ollman puts it, 'they exist there as temporally internal relations' (Ollman 1977: 19; 2003: 28). Now, we have already seen, above, that this type of thinking can be evidenced in Marx's writings when we saw him stipulate that the laws of capitalism can carry only a priori necessity when they can be scientifically identified (i.e. they are necessarily immanent), and so this is an instance of how he divests his spatiotemporal account of change of any possible Hegelian teleological dynamic. We saw this in the context of how the dialectical principle of NN was evident in Marx's critique of political economy.<sup>7</sup>

An important implication of defining society in relational terms is that everything that is discovered about it is 'incorporated into the meaning of its denoting term and becomes part of its concept' (Ollman 1977: 20; 2003: 30). In terms of society's temporal processes of development all possible change is already contained in the many concepts and factors used to describe it. And so we can see more clearly now how Marx's method belongs to the wider NN dialectical system – the negation of a current state of affairs is already contained in Marx's categorical description of specific social factors that he has empirically identified.<sup>8</sup>

### 5.3.2 *Processes of abstraction and DCR dialectical connections*

In all of this we see how temporal processes, spatial processes and existence are interconnected to form the constituent parts of a relation. Two things need to be said in this regard. First, how something changes is part of its nature rather than just something that happens to it (Ollman 2003: 65). This is something that we must remember when we look at exactly how Marx manages to break up this complex world of interconnected relations into portions small enough for him to grapple with. In short, Marx turns to the method of abstraction whereby he pulls factors, categories and concepts from their inherence in the social totality. But he does so in a way that captures within the abstraction how their historical change is part of their existence. Second, as we have seen, as change is defined relationally, we must also treat the context of interaction in which it occurs as part of what anything is. Every abstraction is not to be seen as a mere 'thing', as a discrete object with

temporal and spatial processes not part of what it is but merely things that happen to it, as we have seen with, for example, Hume and Kant. Rather, an abstraction is a process of development in the sense of being both a *moment* (i.e. a temporally isolated part of a process) and a *form* (a spatially isolated part of a process). A further relational aspect of a spatial type is *determination*, which highlights to Marx parts of a relation that are transformational and highlight their tendency to change within the interactive system (Ollman 2003: 67, 68).

It is this process, which Ollman has eloquently demonstrated, that features highly in Marx's method. Certainly, when we look at some of Marx's writings which indicate his methodology this interpretation of him seems to be fairly accurate. In the *German Ideology* (GI: 1846), for example, Marx and Engels's critique of Hegelian idealism is couched in the language of weak apriorism in general and the notion that philosophical abstraction is legitimate but only when its deductions are based on general empirical results:

Where speculation ends, where real life starts, there consequently begins real, positive science, the expounding of the practical activity, of the practical process of development of men. Empty phrases about consciousness end, and real knowledge has to take their place. When the reality is described, *a self-sufficient philosophy loses its medium of existence*. At the best its place can only be taken by a *summing-up of the most general results*, abstractions which are derived from the observation of the historical development of men . . . [W]hen things are seen in this way, as they really are and happened, every philosophical problem is resolved . . . quite simply into an empirical fact.

(Marx and Engels 1976: 37, 39; italics mine)

But what is most interesting for our present purposes is what these abstractions are said to comprise. As part of their critique of the strong apriorism that informs Ludwig Feuerbach's materialism,<sup>9</sup> Marx and Engels attack his concept of man on the grounds that it is not based on a deductive analysis of actually existing human beings. In doing so they reveal a considerable amount about their preferred method of weak a priori abstraction:

because he [Feuerbach] still remains in the realm of theory and conceives of men not in their given social connection, not under their existing conditions of life, which have made them *what* they are, he never arrives at the actually existing, active men, but stops at the abstraction 'man' . . . He gives no criticism of the present conditions of life. Thus he never manages to conceive the sensuous



world as the total living sensuous *activity* of the individual composing it.

(Marx and Engels 1976: 41)

The italicised words 'what' and 'activity' tell us that Marx and Engels think of abstractions as forms, moments and determinations. This sort of thinking also features highly in DCR, as we saw in subsection 2.2.1. 1M CR categories such as emergence, stratification, etc. were redescribed as 2E rhythmical spatiotemporalities. This meant that the spatiotemporal process of the emergence of new material strata was part of its very existence, what Bhaskar calls *existential constitution*, *existential presupposition*, and *existential permeation*. We saw him refer to them as *processes-in-products-in-processes*.

In subsection 2.2.2 we discovered that Bhaskar then subdivided these processes into internal and external relations known as 3L totalities, some of which took the form of contradictory relations and some not. I think this is where Bhaskar departs from Marx's territory because we know that the latter classifies pretty much every spatiotemporal category as inhering in relations of internality. As far as his exposition of internal dialectical connections go, Bhaskar's DCR is extremely useful in understanding Marx's method. For example, as we saw in subsection 2.3.2 the processes of abstraction understood in terms of 2L spatiotemporalities illustrates how Marx used analytical reasoning in order to abstract categories into portions that we can manage epistemically. In short, according to Marx, capitalism should be conceived of as an *intra-active* totality, a *holistic causality* in which emergent phenomena of varying levels of generality are existentially constituted by and presuppose the spatiotemporal processes that produce them.

We also saw in subsection 2.2.2 that, at given points, holistic causalities assume the character of dialectical contradictions and that it is in this terrain that emergence is energised. We thus enter into relations of determinate negation and absence. For instance, DCR helps us to grasp the theory-practice inconsistency in the phenomenon of the wage-form, the contradictions between the use value and value of a commodity and those between the concrete useful and abstract social aspects of the labour it embodies (Bhaskar 1994: 131). Marx has established the ontological necessity of theory-practice inconsistencies in such categories as the wage-form by uncovering the nature of their dialectically contradictory causal relationships.

Bhaskar's externally related totalities, on the other hand, appear difficult to reconcile with anything in Marxian methodology. This is to do with three important methods of analysis, employed by Marx in his process of abstraction, known as abstractions of *extension*, *levels of generality* and *vantage point*. In examining all three briefly in turn we will learn that they hinge on a naturalist intra-active philosophy of emergence, which we have already seen Engels employ above. First,

abstractions of extension are intended to capture the intra-acting parts of each object that is abstracted from the world for the purposes of scientific study. As Ollman puts it '[v]iewing this mutual dependence within each of the interacting parts, viewing the parts as necessary aspects of each other, they become identical in expressing the same extended whole' (Ollman 2003: 77). In this, we see a theory of identity and unity as central to the philosophy of internal relations by virtue of this intra-action. In the *EPM* Marx posits the essential identity between the human essence, society and nature as an essential aspect of his early theories on alienation. He argues that 'only to social man is nature the foundation of his own human existence. Only as such has his natural existence become a human existence and nature itself becomes human. Thus, society completes the essential unity of man and nature, it is the genuine resurrection of nature, the accomplished naturalism of man and the accomplished humanism of nature' (Marx 1977c: 90). Given all that Marx wants to classify as identical, it seems that his abstraction of extension is very wide indeed. And taking into account our analysis of Engelsian dialectics above it should not surprise us that we can find this in Marxian methodology. We saw in subsection 5.2.1 that the discovery that dialectical laws of evolution were operative in both natural and human history was a major feature of Engels's rejection of Hegelian strong apriorism and so it is hardly surprising that we find the method of abstraction appropriate to deal with objects that contain so many internally related aspects spanning several strata of reality.

The problem for Bhaskar's category of external relations is that it is inconsistent with the principles of SEPM and has more in common with the analytical Marxism of Jon Elster (1985), E.O Wright, A. Levine and E. Sober (1992), and G.A. Cohen (2000). I have considered a DCR critique of this school of thought elsewhere (Agar 2003), with a particular focus on Cohen. I analyse the functional explanation that informs his profoundly undialectical interpretation of Marx's famous base-superstructure thesis in the 'Preface' to the *CCPE*:

In the social production of their existence, men enter into definite relations that are indispensable and independent of their will, namely relations of production appropriate to a given stage of development of their material productive forces. The totality of these relations of production constitutes the economic structure of society, the real foundation, on which rises a legal and political superstructure and to which correspond definite forms of social consciousness. The mode of production of material life conditions the social, political and intellectual life process in general. It is not the consciousness of men that determines their being, but, on the contrary their social being that determines their consciousness. At a certain stage of their development, the material productive forces of society come into conflict with the existing relations

of production, or – this merely expresses the same thing in legal terms – with the property relations within the framework of which they have operated hitherto. From the forms of development of the productive forces these relations turn into their fetters. Then begins an epoch of social revolution. The changes in the economic foundation lead sooner or later to the transformation of the whole immense superstructure.

(Marx 1977b: 20–1)

This method of Cohen's rests on establishing important categories of scientific analysis (in this case the social categories of the material productive forces, relations of production and politicolegal superstructure) as interacting in relations of external causality rather than as intra-acting internal relations. Very briefly and simply, Cohen accounts for the existence of production relations of a particular type because of a disposition in the entirely technological non-social productive forces to select production relations that have the power to develop them. The existence of the production relations is accounted for because of their functionality in allowing for the development of the productive forces.

Cohen begins with an antecedent consequence statement which reads 'were the material productive world (*O*) to have production relations of a particular type (*F*) at a particular time it would, as a result, have the power (*E*) to develop the productive forces' (Agar 2003: 295). Law-like statements are developed from this by attaching them to this consequence statement in the following way:

*If it is the case that if object O were F at a particular time, then it would, as a result, be E, then O is F.*

The law is a conditional consequence law because its applicability hinges on the applicability of the consequence statement, as indicated in the italicised words 'if' and 'then' (Agar 2003: 294–5). This all hinges, of course, on there being something about *E* that makes the fact that *O* has the form *F* consequential (Agar 2003: 295). That something is provided by the disposition of the productive forces (*S*). And so we arrive at the explanation why the production relations are of a particular type by reference to the dispositional properties of the productive forces. The consequence explanation for *F* thereby becomes a *functional* explanation.

Significantly, for our present purposes, this type of explanation explains only the existence of the production relations in terms of the 'logical form of consequence explanation' (Agar 2003: 296). That is, we deduce its necessary occurrence by establishing it as a particular instance of a consequence law, or, as I put it, 'to explain its occurrence we only need to prove that if the object in question [i.e. the produc-

tion relations] has some identified function then it is a result of some dispositional fact' (Agar 2003: 296). And so we do not need to bother ourselves with how the functionality of *F* explains its emergence. We need only be able to identify that if *F* has the function of allowing for *E*, then it must be the result of some dispositional fact about *S*. In other words, Cohen thinks that operating at the level of how things appear to us is enough to establish the power of Marx's base-superstructure thesis. We do not need to bother with possible underlying causal factors that might explain the emergence of the functional variable that forms the *explanandum* of his analysis. At the level of appearance, as we know from our study of empiricism, objects appear as only externally related, and so Cohen can construct a metaphysical system that is grounded in an empiricist philosophy of social science by virtue of a straightforward literal interpretation of Marx's base-superstructure thesis as it is presented in his 'Preface'.<sup>10</sup> I suggest that Cohen can defend such a treatment of the famous passage only by taking it out of the context in which it was written (i.e. Marx's vast writings on philosophy and political economy). Taking passages and quotations out of context means that it is often possible for commentators to put all sorts of erroneous spins on what the authors are saying. Taken in context, this passage turns out to be a statement of the abstraction of extension. This must be so if the emergent, stratified and intra-acting conception of the subject matter of the sciences we have identified at work in Marx and Engels's writings is to hold, as surely it must. As I indicate (Agar 2003), the categories of the base-superstructure thesis belong to this wider context, and so Marx wanted us to grasp them as rhythmic and spatiotemporalities inhering in intra-acting totalities (Agar 2003: 302-3). They are abstractions of form, moment and determination and are thus categories that belong to the philosophy of internal relations:

Marx posited this organic unity ... because he believed that despite material and social phenomena having distinctive properties of their own, they only assume their character as distinct properties in the context of their necessary interconnection with each other to produce a totality that consists of this intrarelation of social, material, and psychological properties.

(Agar 2003: 303)

I find it difficult to imagine how Bhaskar's category of external relations has any place in a philosophical system that embraces an emergent and stratified dialectical world of intra-acting totality. Perhaps he would classify the production relations and productive forces as being separate totalities that are immersed in external relations with each other, but this seems to be a significant break from the Marxian abstraction of extension according to which they are but merely aspects of a wider totality. To be more precise, if the relations and forces are de-

fined in terms of a totality of intra-acting emergent strata, then there is an identity with each other that is a necessary feature of what they are. To be fair, Bhaskar does seem to reduce the dialectical significance of external relations by claiming that the tendency for anything to change (i.e. existential contradiction) lies within itself and that external relations function merely to provide an impetus in that direction. But this does little to address the issue of their basic incompatibility either with Marx's philosophy of internal relations or with the dialectical materialist emergentism developed by Engels. At best they remain a wholly unnecessary addition to DCR and at worst they serve to contradict the entire system.

In all of this the important point to remember is that Marx's abstraction of extension functions to allow him to make abstractions large enough so that all the emergent strata that make up particular totalities can be accounted for. Ollman remarks that 'essence generally introduces systemic and historical connections (including where something seems to be heading as well as where it has come from) as part of what it is' (Ollman 2003: 79). The principles of NN, TQQ and IPO are all of relevance here. We saw in subsection 5.2.2 how the former allowed Marx to analyse capitalism as a historical form, containing within it what it is destined to become, requiring him to formulate temporally extended abstractions of considerable scope. As this type of abstraction involves qualitative change TQQ is applicable here also. As Ollman has noted, Marx's temporal abstraction of extension must include both the quantitative aspects of a phenomenon that are likely to energise qualitative transformations as well as the appearances and/or functions of the latter (Ollman 2003: 83). In other words, this type of abstraction will capture the underlying essences that are at work in the formation and development of phenomena as well as their superficial appearances. This must be a matter of course in order to avoid the typical errors of abstracting appearances only, which is a common feature of philosophies of science that posit a world of external relations. Within this historical process is the organic movement of relations – what Ollman calls *metamorphosis* – when an abstraction of extension is made that is large enough to contain the transfer of qualities of something into the things with which it is intra-acting, thereby creating a simultaneous sense of identity and non-identity. And so this is an important part of how what something is becoming is part of what it is, for example when value gets metamorphosed into commodity, capital, money, wages, profit, rent and interest (Ollman 2003: 83). In all of this there is also operating the IPO whereby historical and organic abstractions of extension are governed by the intra-action of contradictory aspects of a relation, such as capital and labour. Ollman calls this the law of contradiction (Ollman 2003: 84).

The second major feature of Marx's philosophy of internal relations

is his abstraction of levels of generality. The process of abstraction is dependent on identifying seven levels of generality. This is of particular interest because it forms an important part of my contention below that Marx's method is similar to that employed by Kant in certain crucial respects. Each level of generality is a specific stratum of the emergent, stratified and totalising world that Marx and Engels so obviously conceptualise. The strata are abstracted in terms of their temporal extension, although they are not meant to be understood as areas of time divided up from each other because they all inhere in one temporal totality. In other words, each level or temporal stratum contains aspects of all of the others. Rather, the point of making these temporal abstractions is so that the period relevant to the formation of the qualities we are concerned with at a particular time, or under a particular academic discipline, are brought into focus. The other levels are thus seen as the origins of the particular stratum we are looking at (Ollman 2003: 89). Level 1 refers to whatever is unique to individual human beings (the here and now). Level 2 is concerned with specific forms of capitalistic production corresponding to specific forms of capitalist industry (a 20–50 year period). Level 3 involves capitalism in general corresponding to the level of production in general (a period of about 400 years). Level 4 refers to class society generally (a period of about 5,000–10,000 years). Level 5 is concerned with human society as such, social qualities that belong to the species dating back to its first emergence (a period of about 1 million years). Level 6 involves characteristics that humans share with the rest of the animal world (a period extending back to the first emergence of complex biological organisms). Level 7 refers to human qualities as a material part of nature. This whole process is captured in Figure 5.1, which, in its entirety, represents the totality of emergent intra-acting strata that make up the material world.

Marx is primarily interested in levels 1–5 and, especially in his so-called 'economic' later writings, he is concerned with levels 2–4. Engels's philosophy of science concerns all levels but especially levels 4–7.

Abstractions of extension and levels of generality are both dependent on the third method of abstraction – vantage point – which involves viewing units of thought from particular perspectives, allowing us to focus in on particular aspects of a relation or the same process from differing moments (Ollman 2003: 100). For example, by making abstractions of vantage point, Marx can adjust his abstraction of extension enough to identify aspects of the productive forces in the production relations or the base in the superstructure (Marx and Engels 1976: 74).

In the next section, we will see that by combining the workable aspects of Hegelian and Kantian apriorism Marx manages to construct his own version, which avoids the subjectivistic errors we have seen at work in his great predecessors in German critical philosophy. Kantian



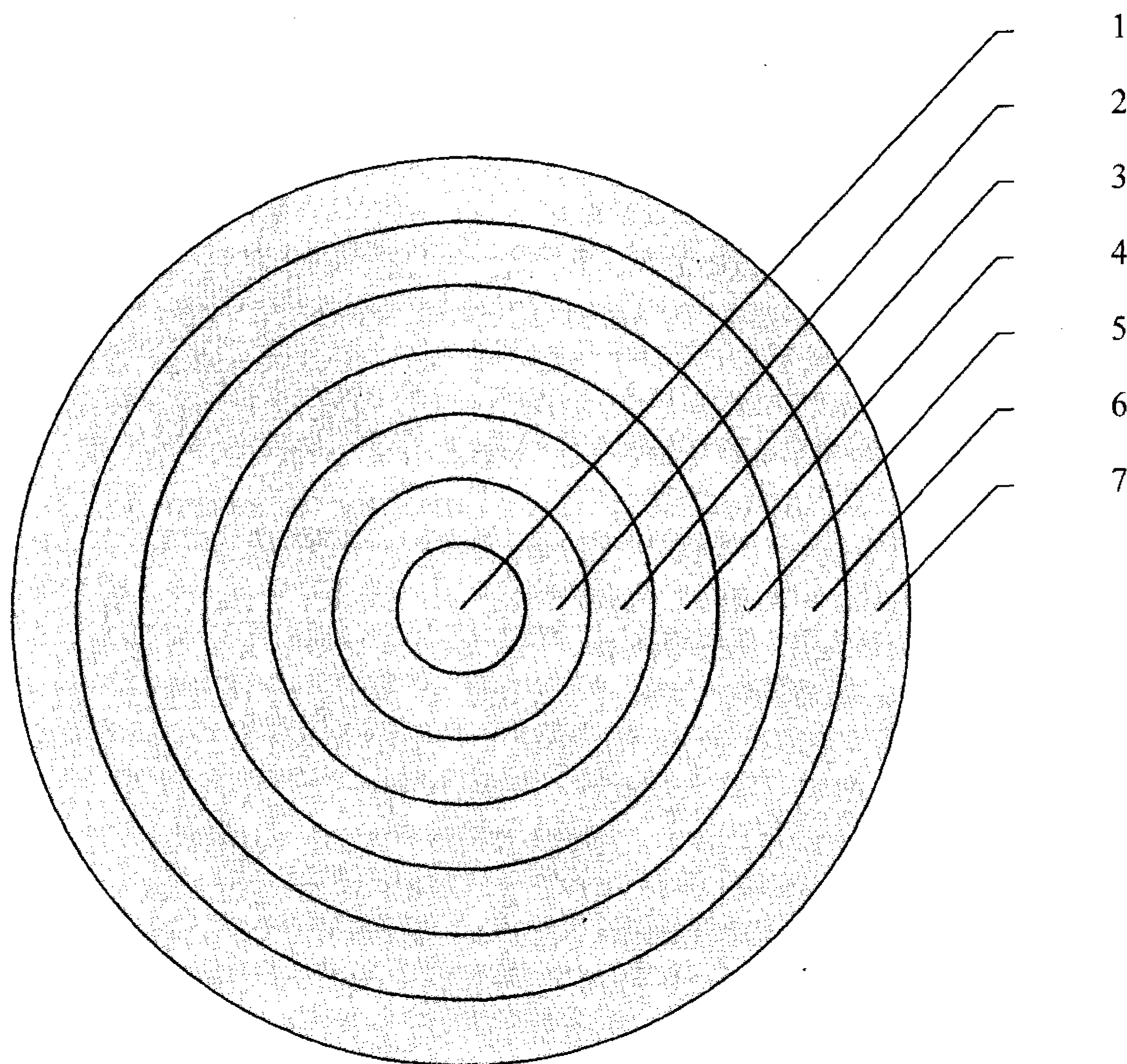


Figure 5.1 Levels of generality in Marx and Engels's method of abstraction.

apriorism is freed from the Humean anthropocentrism via Hegelian epistemological dialectics, and Hegelian phenomenological realist apriorism is freed from its paralysing spiritualistic identity theory via the thought-matter dichotomy central to Kantian transcendentalism.

#### 5.4 Marx's weak apriorism II – Marx's use of Kant and Hegel in epistemology

##### 5.4.1 *Materialist–realist application of Kantian transcendentalism and Hegelian phenomenological dialectics – Marx's epistemological dialectics*

We will see now that within Marx's method it is possible to detect, on the one hand, the methodological principles of Hegelian immanent critique, which can be used to rescue the Kantian critique of pure reason from epistemological absolutism and normativism. On the other, he uses the methodological principles of Kantian critique to rescue Hegelian immanent critique from the spiritualistic uses to which Hegel put it – i.e. his phenomenological realist subject-object identity. The rejec-



tion of the identity theory that lies at the heart of Hegelian phenomenological realism that Marx shares with Kant means that he, too, must be committed to the retroductive method, which we saw in subsection 3.4.1 was integral to empirical metaphysics, a method that Kant used to deduce a posteriori pure spatiotemporal intuition and the categories of the transcendental logic. That is, we have the methodological foundations of weak apriorism. We have already seen this method (minus, of course, the idealist application of it at work in empirical metaphysics) in Engelsian emergentist, realist and materialist philosophy of nature, and so that it crops up again here as a feature of Marx's thinking should not surprise us. And so we will now see that underlying the realist-materialist emergentist weak apriorism at work in Marx's sociology is the combination of specific methodological principles (but not their substantive idealist deductive contents) of the Hegelian and Kantian methods. This will allow us to look at the intellectual inheritance that Marx drew upon from Kant and Hegel in a new and hopefully enlightening way. Thus, it is only with Marx, rather than with Hegel, that the step beyond the Kantian moment in epistemology does not lead straight back to the epistemic fallacy. The introduction of a genuinely materialist and realist epistemological method that avoids epistemic errors occurs only with Marx.

I am not saying that Marx consciously employed any Kantian principles in the way it is possible to identify his intellectual debt to Hegel. Rather, my claim that his philosophy of science functions within a wider materialist-realist and emergentist apriorism is illuminated by seeing the points of contact this system has with Kant as much as re-examining the obvious Hegelian influence. That this point of contact does in fact exist for the philosophical system that Engels did most of the work in articulating can be evidenced in a close analysis of the apriorism underlying some of Marx's writings, particularly some of his socioeconomic studies. On any reasonable interpretation of Marx and Engels it seems that this is the way they want to treat their observation of the non-identity between thought and the concrete object-in-itself. I contend that, although their own method is similar to Kantian deductive apriorism and its attendant non-identity theory which undermines Hegel's immanent teleology, they also depart from Kant by grounding the resultant weak apriorism in the non-transparent emergentist realist material world, freeing it from Humean anthropocentrism. In this regard, they are affirming an important Hegelian truism that is essential to the materialist dialectic, namely that apriorism is not identical to empirical science (i.e. the empirical level of constant conjunctions). This is suggestive of the method of Hegelian immanent critique in that the consciousness does not explain the essence of phenomena, contra Kant, from within the domain of Humean empiricism but rather transcends the domain of the empirical by making scientific results and a priori

categories non-identical. In this way, we can see how certain workable methodological principles in Hegelian dialectics, when placed within an emergentist realist philosophy of science, can be used to overcome the identity theory necessitated by Kant's insistence that essences are tied to the domain of experience.

Lucio Colletti has correctly seen that Marx combined aspects of Kantian and Hegelian logicodeduction to form his own materialist version. In *Marxism and Hegel* (1979) Colletti claims that 'Marx recognises the irreplaceable role of the logico-deductive process' (Colletti 1979: 121). As a defence of Marx against the misinterpretations of his philosophy by 'empiricism or "primitive materialism"' (Colletti 1979: 119), Colletti quite rightly produces evidence of Marx's intellectual debt to Kantian and Hegelian deductivism. That is, he endeavoured to prove that Marx's intellectual debts to Kant and Hegel meant that Marx could not simply rely on induction, contra the empiricist Marxists such as Georgi Plekhanov (1856–1918) and Karl Kautsky (1854–1938). (In subsection 5.4.4, I take issue with his interpretation of Engels as not only belonging to this group but also being ultimately responsible for its philosophy.)

Let us look at the substantive points of Colletti's argument. He correctly argues that knowledge acquisition is a twofold process. The condition of possibility of knowledge is experience of the determinate mind-independent world, but the way that world is conceptualised is dependent on thought. And so subjectivity is at once the effect of causally determining real objectivity, and because that which is said to be reality is a product of thought it is at the same time the cause of causal determining objectivity (Colletti 1979: 119). Colletti therefore asserts that 'for any genuine thinker' (Colletti 1979: 121) there is a clear intertwining of causal determination and subjective creativity that necessitates both inductive and logicodeductive methods of inquiry (Colletti 1979: 119). The moment of direct experience of the concrete world, according to Colletti, requires induction but a complete account of it can only occur when the ways in which it is given representation in thought are taken account of. And given that there is the element of causal determination, that account can only take the form of transcendental logicodeduction. The moment of subjective creativity whereby the concrete is seen as a product of thought reminds one of both Kantian and Hegelian idealism, but the moment of material causal determination is the moment when (as we will see in the quotation below) Marx affirms that this logical process is merely the way thought appropriates reality and is as such reflective of Kantian methodology. What this means is that Marx is committed to the view that the constitution of the real must be a mind-independent process with logic only the means whereby the concrete (natural) is given representation

in the mind. The correct method of advancing from the abstract to the concrete for Hegel, as we have seen with his phenomenological realism, is to make the logical process constitutive of reality, with the natural process only the finite representation of that reality. For Marx, as we will see, it is to make the natural process constitutive of reality and logic merely its representation in thought. In this way, the concrete totality is logical for Hegel but natural and independent of logic for Marx in that it is produced by the mind in a conceptual form but that form is not produced within itself but by something determinate in the real (natural) world that forces the mind to produce it. Colletti is therefore correct to argue that Marx is committed to the Kantian principle that conceptions of the real world are derived from the concept, but the concept does not generate itself but is the outcome of the transformation of empirical sensate perception into concepts (Colletti 1979: 121).

Now what is implied in Colletti's argument is that the combination of Kantian and Hegelian methods developed Marx's own method beyond the idealist forms of their deductive methods. I want to go beyond Colletti and argue that what is deduced is an intra-acting world of internally and emergent dialectical relations. To this end we will refer to a long passage in the 'Introduction' to the *CCPE* in which Marx suggests that he adopts this type of epistemology. For our purposes it is worth reproducing in its entirety:

The concrete concept is concrete because it is a synthesis of many definitions, thus representing the unity of diverse aspects. It appears therefore in reasoning as a summing-up, a result, and not as the starting-point, although it is the real point of origin, and thus also the point of origin of perception and imagination. The first procedure attenuates meaningful images to abstract definitions, the second leads from abstract definitions by way of reasoning to the reproduction of the concrete situation. Hegel accordingly conceived the illusionary idea that the real world is the result of thinking which causes its own synthesis, its own deepening and its own movement; whereas the method of advancing from the abstract to the concrete is simply the way in which thinking assimilates the concrete and reproduces it as a concrete mental category. This is, however, by no means the process of evolution of the concrete world itself . . . . Thus to consciousness – and this comprises philosophical consciousness – which regards the comprehending mind as the real man, and hence the comprehended world as such as the only real world; to consciousness, therefore, the evolution of categories appears as the actual process of production – which unfortunately is given an impulse from outside – whose result is the

world; and this (which is however again a tautological expression) is true in so far as the concrete totality, as a mental fact, is indeed a product of thinking, of comprehension; but it is by no means a product of the idea which evolves spontaneously and whose thinking proceeds outside and above perception and imagination, but is the result of the assimilation and transformation of perceptions and images into concepts. The totality as a conceptual entity seen by the intellect is a product of the thinking intellect which assimilates the world in the only way open to it . . . . (Nevertheless) the concrete subject remains outside the intellect and independent of it . . . . The subject, society, must always be envisaged therefore as the pre-condition of comprehension even when the theoretical method is employed.

(Marx 1977b: 206–7)<sup>11</sup>

What Marx is arguing in this passage is that in the process of thinking – the conceptualisation of the concrete – the concrete appears as a resultant. This is Marx's conception of the 'concrete', which he shares with Kant and Hegel when it is seen as the 'synthesis of many definitions', 'a unity of diverse aspects'; a unity of diverse determinations in the consciousness which enables conceptualisations of the concrete and hence truth claims to arise. And insofar as the concrete is a *product of thought* it is seen to be a point of arrival for epistemology, the place at which the quest for truth ends because thought 'causes its own synthesis, its own deepening and its own movement' that result in the production of the concrete.

Hegel's criticisms of Kant from section 4.1 are of relevance here because, as Colletti points out, Marx's critique of Hegel is with reference to a passage in the *SL* (Hegel 1969: 588) in which the latter is contrasting his own dialectic of matter and consciousness with Kantian apriorism (Colletti 1979: 114). In other words, although Marx makes no mention of Kant he is criticising Hegel's criticism of Kant and so there is reason to believe that he is unconsciously affirming an important Kantian principle. The Hegelian 'synthesis' refers to the thought–matter unity or totality. In subsections 4.1.1 and 4.1.2 we saw that this thinking is evident in Kantian empirical metaphysics in the object-for-us. But we know that the condition of possibility of this totality was the existence of negative noumena (i.e. objects-in-themselves). In other words, the totality for Kant was merely a logical rather than a necessary thought–matter connection. We saw that Hegel wanted to make this totality exhaustive of the *real* (i.e. to redefine the logical process as constitutive of reality) and we know that this leads to his phenomenological realism. This meant that Kant's distinction between the process of conceptualisation of the object and the external

world that is the condition of possibility of this process was collapsed into logic, which subsequently became the real. In subsection 4.1.2 we saw that this was the explanation for his dialectic of matter – downgrading matter to the status of being a manifestation of the Idea. We know that this was the philosophical foundation of Hegel's strong a priori philosophical method and its attendant immanent teleological idealism, constellational monism and realised idealism that we explored in the rest of the last chapter.

Let me immediately clarify. What Marx is doing in the above passage is essentially pointing out the errors of this collapse of logic into reality. He points out the basic truism that we have seen at work in both Kantian and Hegelian deductive methods, that in the process of thinking – the conceptualisation of the concrete – the concrete appears as a resultant. That is, in our conceptualisations of the world we have totality or unity that is a product of thinking. For Kant it is the unity of the manifold of intuition with the transcendental categories and for Hegel it is enmattered rationality that greets basic sense experience. Hence we have Marx affirm this truism that 'the concrete totality, as a mental fact, is indeed the product of thinking.' Now, we know that the collapse of reality itself into this totalising process of thought is the terrain on which Hegel constructs his dialectic of matter and hence his dialectic of consciousness. The synthesis is therefore the point at which thought, by virtue of this fact that the concrete totality appears to result from the concept, appears to reformulate its own criteria of truth measurement thereby transforming the conceptualisation of the concrete. But Kant maintained the distinction between logical process and reality by positing negative noumena as the condition of possibility of the object-for-us. Marx performs a similar manoeuvre although his object is real. So we have the basis of an important point of contact between the conditions of possibility of empirical metaphysics, on the one hand, and dialectical materialism, on the other. In both systems of thought we have the avoidance of strong apriorism and all the subject-object identity problems that are associated with it.

As we know, however, this does not mean that Kant avoided the subject-object identity altogether. Indeed, he only manages to avoid strong apriorism by grounding the object-for-us in a Humean identity theory in which a priori conceptions can only be known in the context of empiricism. As we have seen, I think there is considerable evidence that Marx and Engels construct their dialectical materialism around principles of emergentism, stratification, transfactuality and intransitivity. Like empirical metaphysics, this realist emergentist form of dialectical materialism embraces weak apriorism but, unlike Kant, it is one that can function only on the basis of a subject-object non-identity. In the next subsection I argue that Marx and Engels avoid this

Kantian error by virtue of an important Hegelian principle regarding the relationship between a priori concepts and empirical science.

#### 5.4.2 *Hegelian apriorism and Marxian subject-object non-identity*

Hegel's collapse of the logic-reality distinction is possible by virtue of the non-identity between empirical science and conceptual essences that is the necessary product of the dialectic of matter; it is therefore the point at which Hegel goes beyond the empirical and on to this essential (conceptual) reality. We have seen that this is the moment when, in his view, externally related and contingent scientific findings are provisionally incorporated into strong a priori forms when they correspond to those forms apprehended in basic sense experience. Our discussion in subsection 4.3.1 regarding the human mind's abandonment of its corporeal status and protoconceptual grasp of matter is of relevance here and, hopefully, refreshing the reader's memory about this will serve to clarify what I have just said. We saw that, according to Hegel, the resultant emergence of sensuous consciousness represents the first stage in an epistemic and cultural process through various forms of thought (of our externality from matter) until we arrive at a fully conceptually developed view of nature as enmattered rationality. The journey is energised by the original primitive unity with nature's intrinsic rationality that has been lost but is eventually regained in absolute spirit. We saw in subsection 4.3.2 that basic sense experience acquaints us with underlying rationalistic *elemental* material structures (i.e. necessary and invariant features of any experience of the material world) that correspond to Hegel's a priori deductions. This stands in contrast to the empirical forms identified scientifically which were consequently contingent. This is important to our current discussion because we must understand that this creates an epistemic environment in which concrete totalities identified by science are incorporated into Hegel's strong a priori philosophical system when they can be interpreted as corresponding to a priori rationalistic teleological processes. That is, objects that are identified scientifically are incorporated into philosophy on the condition that they can be interpreted as being compatible with a pre-existent a priori natural form. In the context of our discussion about how logical totalities are produced, it is the elimination of the reverse process of pure matter causing the conceptualisation process that Kant insisted was the condition of possibility of conceptualisation. We saw that this was how Hegel sought to rescue apriorism from what he interpreted as the subject-object identity of Humean scientific metaphysics. To use DCR terminology, it is the period of stability of particular epistemological paradigms analogous to Bhaskar's transitive dimension. As such, it is the U moment in the

U-D-R Hegelian phenomenological schema, the moment of *constellational identity* and *immanent teleological idealism*.

It should not surprise us that, as it turns out in the above passage, Marx is saying that, in reality, essences only *appear* to be products of thought whereas it is actually thought that is produced by the material world *external to it*. He would surely agree with Kant that the production of the world via the logical process of totalising thought does not mean that it corresponds to strong a priori categories precisely because of the reverse process that leads the latter to posit his object-in-itself. We may fool ourselves into thinking that these essences are products of abstract strong a priori theorising but in reality they are emergent from and reflections of materiality. Besides being central to dialectical materialism, this basic point of Marx's, of course, is foundational to his and Engels's historical materialism. In the *GI* they relate this error of collapsing reality into the logical process of thought production to the division of mental from material labour in class societies:

Division of labour only becomes truly such from the moment when a division of material and mental labour appears. From this moment onwards consciousness can really flatter itself that it is something other than consciousness of existing practice . . . Once the ruling ideas have been separated from . . . the relations which result from a given stage of the mode of production . . . it is very easy to abstract from these various ideas 'the Idea', the thought etc., as the dominant force in history, and thus to consider all these separate ideas and concepts as 'forms of self-determination' of the Concept developing in history.

(Marx and Engels 1976: 44–5, 61)

For Marx and Engels, then, primacy is given in the dialectic to the world of matter defined as intrinsically non-rational. We have already seen in subsection 5.2.1 how Engels inverted Hegelian philosophy by arguing that human consciousness was subject to and emergent from dialectical evolutionary processes in concrete non-rational (i.e. pure) materiality. We saw that this critique of Hegelian strong apriorism was central to Engels's materialist, stratified and emergentist dialectical philosophy of nature. To be more precise, Engels's relocation of evolutionary processes in emergent pure matter meant that human consciousness itself was an emergent phenomenon subject to processes of *pure* rather than *rationalised* matter. This is Engels's demolition of Hegelian dialectical ontology – spiritual constellational monism. And the consequence for Hegel's dialectical epistemology (U-D-R) was quite obviously significant in that knowledge development was no longer driven by human consciousness. This demolition of immanent teleological idealism can be detected in Marx's contention that the dialectical result Hegel articulated was only meant to explain the internal



self-development of the consciousness and so Marx accepted immanent critique only in the sense that the unity of the conceptualisation of the concrete is seen as an *outcome* of the 'assimilation and transformation of perceptions into concepts'. There is an essential interconnection between the concepts generated and the perception of the material world in the sense that the former is produced by the latter rather than something that establishes itself in accordance with its own internal criteria of truth measurement.

What Marx is getting at here is, I think, something similar to the concerns we saw the pre-spiritualist Bhaskar express about Hegel's strong apriorism in the last chapter. With the latter's immanent teleological idealism, we have an epistemological process of developing conceptuality governed by an underlying dynamical rationality apprehended in basic sense experience, which effectively reduces epistemology to the out-workings of the Idea. The problem for Hegel, by virtue of immanent teleological idealism, is that this is a process whereby the subject matter of our experiences is not adequately distinguished from the way we conceptually represent it at U, and so it is fatally hamstrung by a subject-object identity, subjectivism and, consequently, the epistemic fallacy.<sup>12</sup> In giving primacy in the dialectic to concrete materiality Marx is demonstrating an implicit criticism of the underlying subjectivism in Hegel's method similar to the one we have seen Engels expound. With such primacy we open up the possibility of a dialectical process of non-identity *from within the parameters of science*, thereby sustaining a workable and consistent form of scientific realism. For this possibility can be realised only if it is possible to establish a dialectical non-identity in the philosophy of science itself rather than a non-identity that is sustained between totalising thought and a contingent metaphysic of science, as we saw in subsection 4.4.3.<sup>13</sup> And we know how the pre-spiritualist Bhaskar manages to do this with his DCR. The end result is an epistemological and ontological dialectical system that sustains thought-matter non-identity within the philosophy of science.

#### 5.4.3 *Kantian apriorism and Marxian subject-object non-identity*

I have suggested that Marx manages to construct this dialectical non-identity via a Kantian-style concern to establish concept formation as grounded in the perception of the intrinsically non-rational thing-in-itself. He then incorporates this into the Hegelian method of dialectical critique (thereby rendering it materialist and non-teleological). In this regard, the insights we are getting into Marx's method here provide us with important additional information which further illuminates the Engelsian philosophy of science as well. This assimilation is in the sense that the production of the concrete in thought is seen as merely 'the way in which thinking assimilates the concrete and reproduces it as

a mental category'. And so Marx is emphasising the need for a historical method that examines how the concrete can never be identical to the mental categories of Hegel's basic sense experience. As I have indicated, Marx (probably unconsciously) affirms the Kantian transcendental principle of the heterogeneity of thought and matter in order to reject Hegel's strong a priori principle of the identity of basic sense experience and intrinsically rational matter and, moreover, what is a further subjectivistic feature of strong apriorism, the rejection of the claim that the mental concrete produces itself.

Let me elaborate. We saw in subsection 3.2.3 that Kant rejected both analytical a priori inquiry and empiricistic aposteriorism on the grounds that a priori categories existed but were deductions restricted in their applicability to the domain of sense experience. And in subsection 3.2.4 we saw that he used his resultant synthetic apriorism to posit a crucial distinction between the data of sense experience and the categories of the pure understanding that are the conditions of possibility of organising and structuring the former. In this way, he overcomes the identity theory at work in Leibnizean rationalism and Humean empiricism, an error that he describes as transcendental realism, as we saw. The thought-matter distinction has two main dimensions corresponding to the 'Aesthetic' and 'Analytic' sections of the *CPR*. In subsection 3.3.1 we saw that in the 'Aesthetic' section Kant describes the thought-matter identity as the impossibility of intellectual intuition (i.e. the impossibility of positing the intuition of an object in sense experience and the conceptualisation of it as indistinguishable). Instead there are pure and empirical forms of intuition which are distinct, the latter being the *matter of appearances* and the former the *form of appearances*. As we have seen in subsections 3.3.1 and 3.3.2, synthetic apriorism and the distinction between matter and our conceptualisation of it is sustained by pure spatiotemporal intuition without which objects could not be given to us in sensation. And in subsection 3.3.4 we saw that in the 'Analytic' Kant presents us with universalising categories, such as cause and effect, which are not supplied by the external material world but by the *transcendental logical categories* which give the mind pure thoughts about objects through which an understanding of the world of cause and effect is reached. It is in the terrain of conceptual understanding that the mind is equipped with the pure a priori synthesis of the transcendental apperception and so emerges as a constituting subject. We then saw in subsection 3.3.5 how the coherence of the resultant object-for-us depends upon establishing the boundary concept of negative noumena (i.e. positing the manifold of intuition as caused by something real 'out there'). The bare ontological concept of negative noumena was a prerequisite to the application of the positive noumena that was the pure categories to the matter of appearance.

In all of this we have a clear distinction between the manifold of intuition and the world constituting activities of the mind, similar to

the sort of distinction to which Marx is alluding in the above passage. Contra Hegel, he says that 'the evolution of the categories appears as the actual process of production . . . whose result is the world . . .; but it is by no means a product of the idea which evolves spontaneously and whose thinking proceeds outside and above perception and imagination, but is the result of the assimilation and transformation of perceptions and images into concepts'. In other words, Marx is rejecting the Hegelian notion that the, as it were, world constituting subject is energised by an external idea (i.e. strong apriorism) but results from the combination of the manifold of intuition with the capacity of the human mind to develop conceptual understanding of what it experiences. We have something rather similar to Kant's relation between the manifold of intuition and the logical transcendental categories. In Colletti's language it is the acknowledgement of the existence of mind-independent matter as the conditions of possibility of the logical totalising process. Kant would surely agree with Marx's statement that 'The totality as a conceptual entity seen by the intellect is a product of the thinking intellect which assimilates the world in the only way open to it.'

#### 5.4.4 *Colletti's misunderstanding of the Hegel-Engels relationship*

In a moment I will explore the possible Kant-Marx relation with reference to important work undertaken in the area of Marxian economic theory by Derek Sayer. We will see that the Kantian logical principle that transcendental categories have application only via developed (i.e. not basic or protoconceptual) experience (i.e. the rejection of Hegelian strong apriorism) is used by Marx in his analysis of actual socio-historical forms. Before we do, I want to pause for a moment and say something more about Colletti's interpretation of Marx and Engels. His stress on the importance of this relation to Kant is useful to my contention that Marx and Engels's formulate an emergentist and stratified dialectical materialism. Colletti would agree that Kant is important to Marx's materialism but unfortunately he does not recognise the importance of Engels's contribution. I put this down to the failing in Colletti that many scholars of Marxism seem to share, that of simply misunderstanding Engels.

The first indication of a chronic misreading of Engels comes when Colletti dismisses Engels's inversion of Hegel as a 'mere mechanical transcription' (Colletti 1979: 22). Colletti argues that it is impossible to perform such an inversion and end up with a consistent dialectical form of materialism. This is because Engels attempts to ground the directionality and coherence which Hegel attributes to the idea in a domain that Hegel eliminates – matter. Hegel's dialectic of matter

operates within a wider Platonic–Christian philosophical system which is attempting to prove the existence of God by negating matter. The problem for Engels (and, as it turns out, Lenin), according to Colletti, is that in simply inverting Hegel they are trying to identify an underlying materialism in absolute idealism (which Hegel demotes to the status of finitude) that does not actually exist in any of Hegel's writings (Colletti 1979: 24–7). Externally related contingent matter is not just subjected to the Idea, it is eliminated altogether. As we have seen repeatedly in these last two chapters, this is the most important feature of Hegelian strong apriorism, an interpretation of Hegel that I have argued Marx and Engels both shared. The logic–reality dichotomy that Marx owes to Kant, Colletti tells us, meant that his materialism could not possibly be based on a simple inversion of Hegel because the former appreciated that there was no such underlying materialism at work in absolute idealism. This is precisely why Kantian principles are detectable in Marx's writings. Presumably Colletti believes that no such principles are evident in Engelsian philosophy. And so there is none of the crude 'mechanical transcription' of Hegel with Marx that we apparently get with Engels and Lenin. But even the briefest of acquaintance with my discussions in section 5.2 is enough to demonstrate to the reader how Colletti's reading of Engels (and, by logical extension, Lenin) is wrong.

For Colletti, the similarity between Hegel's conception of dialectics and Engels's is that both criticise science for its metaphysical leanings. For Hegel non-dialectics (i.e. identity theory) are grounded first and foremost in the intellect (or the understanding moment in the U-D-R schema, which is the period of dominant scientific paradigms). But, as we know, Hegel thinks that science is just the product of our pre-scientific tendency to treat objects as contingent and externally related. For Engels, on the other hand, the principle enemy of dialectics is apparently 'none other than science' (Colletti 1979: 41). We examined his thinking in this regard in subsection 5.2.1 when he suggested that the metaphysical outlook of pre-nineteenth-century science represented a fairly serious limitation. The problem that this creates for Engels is obvious, or so Colletti would have us believe. Although Hegel can criticise science for its metaphysical tendencies and remain constituent to his absolute idealism (by virtue of the apriorism–science non-identity), by also rejecting metaphysical science Engels ends up undermining his own case for a materialist inversion of Hegel via weak apriorism.

Engels apparently fails to understand the dialectic of matter as a process of matter's annihilation and instead confuses it with the development of scientific thinking that operates with a dialectical conception of nature as one of an intra-acting totality (Colletti 1979: 49). The problem for Colletti is that this thesis rests on his own misunderstanding (or deliberate ignoring of) important developments in nineteenth-

century science. He makes the extraordinary statement that 'there are serious and well-grounded reasons for doubting that there ever really existed any science . . . other than the one criticised by Engels' (Colletti 1979: 44). He then proceeds to make the dubious claim that '[s]cience is a form of metaphysics because it is founded on the principle of identity and non-contradiction' (Colletti 1979: 45). This in itself is a questionable thesis but he compounds the situation by saying that 'the "new" science, which ought to be contrasted with the old one, seems, for the most part, and notably for Engels, only a science that . . . is yet to come' (Colletti 1979: 49). He mentions the sciences of Kepler, Galileo and Newton as all examples of the 'old' science. There is absolutely no mention of scientific discoveries that clearly belong to a dialectical worldview, such as the Kant-Laplace discoveries regarding the solar system or Darwin's achievements in biology, both of which we have seen Engels refer to with enthusiastic approval. More importantly, I suggested how the emergence of new approaches to science such as these, in true weak a priori form, carried with them massive ontological significance. Sure enough, on the basis of such discoveries Engels constructs his dialectical materialist philosophy of nature positing an intra-acting totality of emergent and stratified material reality subject to *its own* historical evolutionary laws. Indeed, we saw that making philosophical deductions from the results of these sciences was the explanation for how he extended Hegelian evolutionary ideas in the social world into nature itself, eliminated them from the social world, and then divested Hegelian philosophy of nature of its teleologism that we saw at work in the *PON*. In subsection 5.2.4 I used this point to undermine Benton's erroneous thesis that Engels embraced teleological monism. But because Colletti does not appear to have grasped this from his reading of Engels he makes the (sadly common) error of dismissing his work as 'an acritical restoration of Hegel's old "philosophy of nature"' (Colletti 1979: 44). In other words, on the basis of Engels's weak apriorism (which Colletti does not appear to recognise), far from him simply mimicking Hegel's dialectic of matter in a confused misunderstood manner (i.e. attempting to simply impose Hegelian world energising principles in matter itself), he actually transforms essential aspects of these principles in accordance with the dictates of new scientific discoveries of his time. Such achievements by Engels, as I suggested, stand as testimony to the benefits of operating dialectics within the parameters of weak apriorism because they avoid the subject-object identity errors characteristic of Hegelian strong apriorism. In this light, Colletti's claim that 'the dialectic of matter is in all respects identical to that of "dialectical materialism"' (Colletti 1979: 51) is hardly fair.

What Colletti is in fact doing is lumping Engels in with the theoreticians of the Second International. In the writings of men such

as Kautsky (1988) we can indeed detect a crude identity, the result of which is an unworkable dialectical materialism. Given his mechanical transcription of the dialectic of matter we can, as it turns out, convincingly identify an implicit philosophy of externality that is very similar to the kind of economic/technological determinism we saw at work in Cohen in subsection 5.3.2.<sup>14</sup> But I contend that we cannot identify anything remotely similar going on in Engels' writings and any attempt to do so displays nothing more than a failure to understand him. Once we grasp the true character of his philosophy we see that it is entirely consistent with and, indeed, indispensable to Marx's philosophy of internality. Moreover, as I have suggested, one can recognise the Kantian influence on Marx (and Engels) without having to abandon some important Hegelian influences on their thinking.

#### 5.4.5 *An example of Marx's Kantian influence – the economic categories in his critique of political economy*

Derek Sayer, in his book *Marx's Method* (1979a), argues that critical philosophy in Marx's analysis of political economy owed much to his adoption of the transcendental principle and that there are thus grounds for drawing methodological comparisons between Marxian and Kantian methodology. He argues that the Kantian transcendental analytic (the method of proceeding from the transcendently objective to its transcendently subjective presuppositions) was incorporated into Marxian social scientific investigations. Marx, like Kant, worked from phenomenal forms that appeared to have an objective mind-independent existence to their conditions of possibility and, specifically, to their historical conditions of possibility. This is central to Sayer's thesis: 'It is just such an analytic, I shall argue, which furnishes Marx with the principles on whose basis he eventually constructs the scientifically adequate historical categories' (Sayer 1979a: 109). According to Sayer's analysis, Marx claims that a priori categories – transhistorical categories that all forms of production share – are necessary in order to identify those characteristics of specific productive forms that define them as unique (Sayer 1979a: 113). That is, without the a priori deduction of certain transhistorical categories it is impossible to identify those features of specific productive forms that are unique to them. These concepts are thus the a priori conditions of existence of phenomenal forms analogous in method to the identification of transhistorical synthetic structures of the mind (i.e. the transcendental logical categories) in empirical metaphysics. Now, what is crucial in terms of Marx's affirmation of the Kantian principle that concepts are reflections of concrete social and historical conditions is his contention that transhistorical categories are also a posteriori because they could be identified only by

studying various modes of production throughout history and drawing comparative conclusions from them. This is very similar to Kant's restriction of the application of the logical categories to the remit of a posteriori science. Thus, a priori deduction depended upon a posteriori analysis, and so the starting point of Marx's substantive social scientific investigations must be with phenomenal forms.

In emphasising transhistorical categories we are working firmly within the philosophy of internal relations, in general, and the levels of generality, in particular. I want to suggest that the similarities between Marxian and Kantian methods are a crucial aspect of Marx's weak a priori deduction of productive features that all human societies share. This appears to suggest that his abstraction of generality level 5 is of particular importance in his critique of political economy. In highlighting the important similarities between Marx and one of his great predecessors in German critical philosophy we must remember that all of this functions within a dialectical philosophy that is absent from Kant and so we must pay heed to the massive importance of Hegelian non-identity between empirical science and a priori categories. And it is by virtue of these processes of dialecticising crucial categories of analysis that the abstracting process extends to the abstraction of transhistorical categories that inhere in an intra-acting totality. It is precisely by virtue of the Hegelian influence on Marx's method of abstraction that his deduction of transhistorical a priori categories can be distinguished from Kant's own.

For example, what all labour products have in common is their use value which is thus said to be the natural form of production in general and 'the necessary condition, independent of all forms of society, for the existence of the human race; it is an eternal nature-imposed necessity, without which there can be no material exchanges between man and nature and therefore no life' (Marx 1977a: 50). But Marx arrives at this generalisation only via the study of the commodity that is a specific form in capitalist economics (i.e. level 3) and so these a priori categories depend upon direct empirical study. After identifying the phenomenon of the commodity form Marx can then distinguish the attributes that it shares with all forms of labour (its use value) to those which establish it as a definite social form (its exchange value).<sup>15</sup> It is those characteristics of production in general that allow him to identify characteristics of definite social forms that do not accord with them, and it is in this way that he is provided with his epistemically interesting subject matter (i.e. the study of those characteristics in specific modes of production which define their status *as* specific modes (the specific forms of exchange value) that thus constitute their sociohistorical forms). It is these modes that constitute Marx's explananda and he thus proceeds to identify their conditions of possibility, their explanans. The necessarily a posteriori character of Marx's method means that these general



categories cannot be said to have any real existence *independent* of the particular forms in which they inhere; they are merely attributes of phenomena (Sayer 1979a: 79). In this observation, it seems to me that Sayer is acknowledging the intra-acting nature of the levels of generality and so presumably that the abstracting process belongs to an extension of temporal processes rather than a mere interaction (i.e. relations of externality) between transhistorical and historical categories. In the 'General introduction' to the *Grundrisse* (GR; 1857) Marx is clear on the matter:

There are characteristics which all stages of production have in common, and which are established as general ones by the mind; but the so-called general preconditions of all production are nothing more than these abstract moments with which no real historical stage of production can be grasped.

(Marx 1974: 88)

And so Sayer points out that there can be no transhistorical covering laws from which Marx could straightforwardly infer essential relations from specific productive forms (Sayer 1979a: 114). This means that, contra the Hegelian claim that concrete categories are collapsed into mental conceptualisation, a priori transhistorical categories can be the outcome only of the study of the specific production forms in which they are discovered; they are the result of the 'elaboration of perception and representation into concepts'. They have logical mental forms that are interconnected with and, moreover, are the products of their mind-independent existence, and so Marx is demonstrating a Kantian concern with how mental concepts are generated (out of the manifold of intuition). Their concrete forms may appear as resultants of a non-empirical transhistorical conceptualisation but in actual fact the reverse is true.

## 5.5 Conclusion

As I have already indicated the Kantian and Hegelian influences on Marx's more or less successful elimination of identity theory in its many guises represents important insights into how the Marx–Engels worldview can sustain a coherent form of materialist emergentist realism. Kant's thought–matter dichotomy and Hegel's dialectical immanent critique provide the important groundwork for the construction of a workable form of realism (i.e. emergentist and materialist) that overcomes the limitations of their respective idealist systems. Equipped with this analysis of Marx we can appreciate how his method constituted the application to the social world of the emergentist realism fully expounded by Engels. An important theme in this chapter

has been how we can detect how each side of this famous intellectual partnership depends on the other for a full understanding of their philosophical arguments. Without Engelsian philosophy of nature we find it difficult to fully grasp Marx's philosophy of internal relations and without the latter we are missing some important methodological principles which can illuminate the former. In particular, as we have seen, with Marx we get important insights into how emergentist-realist dialectical materialism has closer ties with two of the giants of German critical philosophy than one might otherwise imagine. It reveals to us how Marx stands considerably closer to Kant than most scholars have imagined, even though his Kantianism was implicit. And even with Hegel we should not just rely on the traditional view that Marx and Engels simply inverted his idealism. I have suggested that there is slightly more going on here than that by drawing attention to the implications of their weak apriorism. Their philosophical deductions occurred at a time when the most important scientific advances suggested a world of dialectical internality. The result was a radical transformation of Hegel's dialectic and not just a simple inversion. We have seen how Engels was particularly important in this regard. The end result is a philosophical materialism which, by the implicit use of Kant, arrives at a sustainable dialectical realist philosophy of science.

# Conclusion

In this study I have attempted to show that with Marx and Engels we can detect a dialectical materialism that is founded on principles of emergence, stratification and subject–object non-identity. The end result is a form of materialism that is epistemically and ontically consistent and coherent. My main purpose, however, has been to show that this depends upon them drawing upon the German intellectual tradition of philosophical critique found in Kant and Hegel. I have argued that central aspects of what makes Marx and Engels's system workable are broadly similar to Kantian and Hegelian apriorisms.

In all of this I have drawn on the most progressive elements of Roy Bhaskar's CR and DCR. After providing introductions to both (which were hopefully useful to the reader unfamiliar with this tradition), I proceeded to highlight the important intellectual debts Bhaskar owes to Kant and Hegel as well as demonstrate how the former manages to progress beyond the limitations of their respective systems. He achieves this by a realist (and implicitly materialist) application of important a priori principles at work in empirical metaphysics and phenomenological dialectical realism respectively. This helps illuminate the possible points of contact between Kant, Hegel, Marx and Engels as I have also argued that the last two thinkers manage to remain within the parameters of consistent dialectical realism more than Bhaskar has. I have in mind here in particular his attempt to carve out a territory for a philosophy of external relations within an otherwise consistent DCR philosophy of internality and especially his recent 'spiritualist turn', which I contend has more in common with the Hegelian strong apriorism he undermines in his earlier work.

The end result is, I hope, a convincing case for how we should approach Marx and Engels in a way that does justice to their philosophical thinking. For too long scholarship in this area has been hamstrung by a quite unacceptable and unfair classification of either or both of these thinkers as operating with a crude empiricism that leads to economic determinism and reductionism. This mindset of those who

wish to understand Marx and Engels has led to quite unfair conclusions about their work. One school of thought that has been produced from this is loosely classified as 'post-Marxism' with Ernesto Laclau and Chantle Mouffe (Laclau 1990; Laclau and Mouffe 1994) perhaps its foremost exponents. They begin from the incorrect position that Marx and Engels are so closely wedded to economic reductionism and determinism that the best we can do is essentially divest any philosophical significance from their critique of class society in general and capitalism in particular. They reject any attempt at formulating an ultimate conception of humanity and reason as nothing more than a rationalist vanity that obscures our understanding of the way the world actually is. Post-Marxists generally argue that there is no pre-given objective reality that is supposed by the fact-to-value argument of EC or the DCR contention that the social world is to be understood as an internal set of mediations. On the contrary, the meaning of any object of analysis in social science is dependent upon the particular way it is experienced by social agents in given discursive contexts (Daly 1999: 62). That is, social phenomena depend for their existence on the political establishment of a discursive context (Daly 1999: 64). I have argued elsewhere (Agar 2002) that the postmodernism that this interpretation of the 'best' parts of Marx rests upon is replete with epistemic and ontic errors. Engels is deemed to be completely irredeemable as he is supposedly responsible for the empiricism, determinism and general crude dialectical materialist philosophising that led to Second International Marxism. Apart from my criticism of Lucio Colletti in subsection 5.4.4, Terrell Carver's attempts to distance Marx from Engels spring most clearly to mind here. In several works (Carver 1981; 1983; 1998) he effectively debunks the latter's works along these lines and buys into this fashion of 'rescuing' Marx from the distortions of his friend and collaborator. From what I have been saying in Chapter 5 it should come as no surprise that I do not share Carver's opinions.

Marxist scholarship that rejects the deconstructive approach is not beyond criticism either. One thing post-Marxists have in common with, for example, analytical Marxists is an economic determinist reading of Marx and Engels. If this forces the former away from it and in the direction of deconstructivism then the latter runs headlong into its full embrace, as we have seen with Cohen in Chapter 5. All the more reason why studies that do justice to the writings of Marx and Engels are needed, an endeavour I hopefully have contributed to. By doing so, I hope that I have done something to revindicate the explanatory power of dialectical materialism.

But this piece of work is not exhausted by making this contribution. For it depends for its coherence on my contention that dialectical realist and emergentist materialism belongs to a rich intellectual tradition that begins with Kant, is enriched by Hegel, and completed by Marx

and Engels. Hopefully this will encourage scholars who are interested in Marxism to look once more at the foundations of Marxist philosophy in ways that do justice not only to Marx and Engels but also to their esteemed German predecessors. It is important that those of us interested in Marxism believe that it is still possible to talk about dialectical materialism without feeling embarrassment. For too long these have almost been two dirty words, especially in the social sciences. But because of the immensely important work undertaken by Bhaskar (at least in his pre-spiritualist writings) and others a new scholarship is emerging which is returning to dialectical materialism and cutting away all of the distortions and misrepresentations of its principles, under which it has suffered for so many years. And I hope that my argument that the success of this undertaking lies in identifying new interpretations of the Kantianism and Hegelianism underpinning dialectical materialism contributes something useful to this task.

# Notes

## 1 Critical realism before the dialectic

- 1 See also n. 2 below.
- 2 Elsewhere Bhaskar contends that Hume's philosophy is a typical example of the epistemic fallacy, according to which 'statements about being can and will always be analysed as not explicated in terms of statements about our knowledge of being . . . it merely masks the generation of an implicit ontology . . . of atomistic events and closed systems' (Bhaskar 1993b: 205). What Bhaskar is getting at here is that even idealist philosophies contain an implicit realism. As he says 'Ontology – and realism – are inexorable' (Bhaskar 1993a: 205).
- 3 Interestingly, Bhaskar is totally open minded (in his early work at least) about whether the mind 'just is a complex or set of powers, as far as we know, historically emergent from and present only in association with (certain complex forms of) matter' or 'there is a substance, whose nature is at present unknown, which is the bearer of those powers' (Bhaskar 1998: 98). As we shall see in section 4.5, however, he does commit himself in his recent work *FEW*. Sadly, it is a commitment to the spiritualistic explanation that I will argue is impossible to reconcile with CN.

## 2 Dialectical critical realism

- 1 In section 3.3.6 below we will see that dialectical thought is central to what Kant calls the transcendental illusion – the inevitable and unavoidable propensity of the mind to grasp the object-in-itself – an achievement that is beyond us but is nonetheless crucial in establishing the parameters of what we can know, namely the object-for-us.
- 2 The first thing to say about internal contradictions is that Bhaskar distinguishes between dialectical connections and contradictions. This is because he thinks that we should not equate the two because 'by no means all dialectics depend upon contradiction' (Bhaskar 1993a: 56). Hopefully this will become clear in due course.
- 3 I have argued elsewhere (Agar 2003) for this interpretation of Marx's base-superstructure thesis against the analytical dualism characteristic of G.A Cohen's functional explanation. I consider this in more detail in section 5.3.1.
- 4 I don't have the space to engage in any detail with Bhaskar's theory of external relations but my problems with it are detailed in subsection 5.3.2.
- 5 We will see in section 5.3.2 that external contradictions are not features of Marx's method and that Bhaskar's use of them serves only to confuse our understanding

- of the relations that govern the emergence and development of holistic causalities (totalities).
- 6 The alethic truth is essentially the truth of a statement like 'I am not free to realise my full potential' that is independent of the statement. It is established by immanent EC. This is crucial for the dialectic of social scientific discovery and is the social scientific form of a general scientific process of the development of knowledge. A generative mechanism that is discovered to explain the workings of some object at a higher stratum constitutes the establishment of the alethic truth of the statement about the object at that higher level. In social science referential detachment can help identify the reality of some ill-being while in natural science it can help identify the reality of some generative mechanism functioning at a deeper level that explains a generative mechanism at a higher level. We can therefore establish a new level of real causation at 1M via referential detachment. For a discussion of how referential detachment is important in science see PE (Bhaskar 1994: 24–8).
  - 7 In *GI* Marx and Engels make it clear that the theory of historical materialism depends for its coherence on the notion that what defines us as human beings is first and foremost the unique character of our physical activity (labour):

Men can be distinguished from animals by consciousness, by religion or anything else you like. They themselves begin to distinguish themselves from animals as soon as they begin to produce their means of subsistence, a step that is conditioned by their physical organisation . . . This mode of production must not be considered simply as being the reproduction of the physical existence of the individuals. Rather it is a definite form of activity of these individuals, a definite form of expressing their life, a definite mode of life on their part.

(Marx and Engels 1976: 31)

- 8 Feuerbach was a materialist philosopher who grounded his materialism in strong apriorism. Abstract theories (i.e. Christianity and Hegelianism) were merely the alienated projection of the essences of real living human beings. Feuerbach was a humanist in that he thought that Hegelian/Christian values were alienated projections of *human* values. For Marx, this was merely an application of speculative philosophy to materialism – the notion of a fixed human essence standing above men and women's immersion in actual concrete conditions. This prompted Marx to make his famous pronouncement against Feuerbach in his *Theses on Feuerbach* (1845), 'Feuerbach resolves the essence of religion into the essence of man. But the essence of man is no abstraction inherent in each single individual. In reality it is the ensemble of the social relations' (Marx and Engels 1976: 7).

### 3 Kant

- 1 This does not mean that Kant wants to incorporate ontological or metaphysical questions into epistemological ones because we will see in a moment that he still thinks that a priori philosophical truth is possible. He just wants to reclassify what it is that is a priori: rather than it being the object-in-itself, it is the object-for-us. The search for philosophical truth can resume after its dissolution under Humean empiricism but under the restricted terms of the Copernican Revolution. What we are looking for is information about how the objects are within the parameters of how they appear to us rather than how they are independent of these parameters. We will see in a moment that this is Kant's attempt to resurrect metaphysics from within the terms of Humean empiricistic principles regarding how we experience the world, his *empirical metaphysics*.



- 2 See subsection 3.4.1 below.
- 3 In itself, the Copernican Revolution does not stipulate anything about metaphysics as such. To say that an object must conform to our mode of cognition is simply to make an epistemic point about methodology. It is not quite the same thing as making a proposition about what those objects actually are, which is the job of metaphysics. So we should understand Copernican methodology and transcendental idealism as in principle distinct. But they are logically connected because, if we make the epistemic statement that the object must conform to our mode of cognition, then implicit within this is the presumption that there is something in the nature of the object that makes this conformity hold. In other words, the Copernican Revolution dictates that the objects of our cognition by their very nature must be exclusively objects of sense experience and so we have an implicit ontological contention that is Kant's empirical metaphysics. The converse to this is epistemological or transcendental realism, which contains the ontological argument that there is nothing in the nature of the object that means that it must conform to human cognition at all because it is a self-subsistent object-*in-itself*. And so, whatever epistemology we embrace – be it Copernican or pre-Copernican – there is contained within it an implicit realist or idealist ontology (Gardner 2002: 44).
- 4 There are other arguments that Kant uses that I do not have the space here to examine. The first involves the assertion that if space and time were transcendently real, then we would be committed to the absurd position that we can know about two infinite yet insubstantial things. And a second argument is that if God is to be conceivable then space and time cannot be transcendently real. If they were transcendently real then they would be conditions of God's existence. This, in turn, would mean that God could not come to know Himself because His intuition is non-sensible and so He could not come to know of His own existence. This is a contradiction of God as an omniscient being and so if the transcendental realists are right then God is inconceivable (Kant 1998: B71–2, 191; Gardner 2002: 102).
- 5 It is also essential to my examination of a possible Kantianism implicit in Marx's philosophical method in section 5.3.
- 6 I must confess that I myself have been guilty of this confusion (Agar 2004: 166) and so am glad to take this opportunity to set the record straight.
- 7 In the next chapter I will discuss the fairly obvious objection Hegel (among others) has drawn to this: a concept of a non-object is ontological nonsense because it is the concept of something that we are effectively saying is not there.
- 8 See n. 3 above.
- 9 Kant's failure here hinges on the issue of the distinction between the mere empirical identification of something and its universality. Bhaskar makes it in the following way. At the level of the empirical in open systems, as we know from section 1.2.4, it is impossible for empirical regularities to prevail. Thus, to ascribe necessity to them, as Kant does, is to immediately accept a central Humean notion regarding appearances. In this move, Kant at once ties all his subsequent synthetic a priori metaphysics to an empiricist account. Bhaskar, on the other hand, insists that necessity can be ascribed to an empirical occurrence only if an underlying mechanism can be identified as the cause of it. As he argues 'necessity as such, like universality, is thus ascribed to the activity of the mechanism; and only derivatively to some particular event sequence' (Bhaskar 1978: 165).
- 10 Lucio Colletti in his important work examining the development of the epistemological principle of *critique* in German philosophy from Kant to Marx makes a useful observation about Kant in this regard. He contends that transcendental idealism must be understood as involving a materialist critique (criticomaterialism)

in that, by making the criteria of valid epistemological theory conceptual, Kant was demonstrating a profound scepticism towards reason disconnected from its capacity to comprehend the actual. In other words, our contentions about being must begin at the level of empirical regularity. And we have seen in this chapter that this is the reason for his empirical metaphysics. Colletti classifies the Kantian critique of the TR confidence displayed by rationalism as *extralogical* (Colletti 1979: 92). What I take from this (although I doubt this was what Colletti had in mind) is that because the object-for-us begins at the level of sensible intuition, which presupposes an empiricist account of causation, then it is susceptible to the Bhaskarian accusation that it will be unable to sustain a credible and coherent theory of objectivity. For surely it is a contradiction to say that metaphysical truths about the world can be retroductively derived from an account of causation that cannot allow for natural necessity and universality? Because of this unavoidable association with Humean empiricism it follows that many of the accusations Kant levelled at Hume (e.g. that he is unable to make the critical distinction between raw sense data and the object-in-itself) can be turned around on to Kant himself. I discuss Colletti's argument in more detail in sections 5.4.1 and 5.4.4 with regard to its importance to Marxian materialism.

- 11 This is so because, as I explained in section 2.2.2, mediated totalities require 2E bipolarity which in turn requires 1M emergent stratification. Humean 1M errors of empiricist ontology necessitate 2E ontological monovalence leading to 3L detotalisation and the dissolution of 4D transformative praxis.

#### 4 Hegel

- 1 The *PS* is the more famous text but we will also refer to the *PSS* because it belongs to the three volume *Encyclopaedia* alongside the *PON*. Alison Stone has recently argued, quite persuasively, that it seems likely that Hegel's account of consciousness in the *PSS* was designed to complement his account of nature in the *PON*, despite the fact that the *PSS* is not as such concerned with grounding the development of consciousness in epistemology (Stone 2000: 727; 2005: 33). This interconnection between his epistemology and ontology will be crucial in our overall objective of grasping the relations between Hegel, Kant, Marx and Engels.
- 2 In section 3.2.2 we defined apriorism as the *critical* examination of the conditions of possibility of experience.
- 3 See section 3.2.2, n. 3.
- 4 See n. 12.
- 5 See section 3.2.4.
- 6 See section 3.3.1.
- 7 See section 3.2.1.
- 8 See section 3.2.3.
- 9 See section 3.3.4.
- 10 Schelling and Feuerbach prefer to derive nature from the basic 'that' of existence – i.e. they begin from the basic truth that there exists a material world. For Schelling the 'That' is ultimately God whereas for Feuerbach it is primordial matter. As Stone points out, Feuerbach's criticism is particularly useful in that it exposes the contradiction in Hegel's notion of purely rational ontological *structures*. For to be an ontological structure implies the existence of some primordial material for which rationality can provide the structure (Stone 2005: 102–3).
- 11 Hegel first discusses this in detail in the *PS* as the consciousness goes through several stages in which it attempts to overcome the subject–object antinomial problem (sensuous consciousness, perception, force and the understanding and

self-consciousness). The whole project of the *PS*, *PSS* and *PM* is intended to demonstrate how the consciousness comes to the realisation that the process of coming to know the universal (i.e. the certainty of our knowledge) and the universal itself are intrinsic aspects of the same process. Only when the process is complete is the consciousness able to reflect. From the standpoint of absolute knowledge it can examine the dynamical universal-individual struggle explicitly in the form of the understanding-dialectic-reason (U-D-R) process. This process in the human consciousness is basically the epistemological out-working of the logical categories (Stone 2000, 2005: ch. 2).

- 12 This is distinguished from the interpretations of Hegel's philosophy of nature offered by Michael Petry (1970), Gerd Buchdahl (1993) and William Burbidge (1996), all of which Stone calls *weak* apriorism. This method essentially involves the argument that philosophers of nature begin their inquiries by studying scientific a posteriori approaches to the investigation of the natural world. That is, they study the laws and forces at work in the natural world that seem to make it susceptible to scientific study. They then try to deduce from these results a logical order (i.e. a rationale) that they seem to suggest is present in nature. Hegel remarks on the dependence a priori philosophising should have on empirical findings in the *PON* when he says that 'the *origin* and *formation* of the Philosophy of Nature presupposes and is conditioned by empirical physics [the scientific study of nature]' (Hegel 1970a: §246, 6). According to this school Hegel sought to either buttress empirical concepts with a priori categories (Petry and Buchdahl) or deduce them a posteriori from the results of empirical science (Burbidge). Alas, I do not have the space here to analyse these theories – suffice to say that Stone acknowledges that they receive as much textual support in the *PON* as her own strong a priori interpretation and that Hegel presumably 'adopted whichever method is more philosophically cogent' (Stone 2005: 8). I consider this in more detail in section 5.2.4.
- 13 This is the act of conferring logical necessity upon a set of scientific findings that could in principle be (and were, in Hegel's case) revised, amended and even rejected entirely in accordance with further developments in the empirical study of the natural world. I will talk more of this problem in my critique of Hegel's phenomenological theory below.
- 14 I will argue below that this idea of there being a necessary and logical distinction between science and basic sense experience is something that Hegel shares with Roy Bhaskar but for rather different reasons.
- 15 In the section of the *PON* from which the term *petrified intelligence* is taken Hegel clearly alludes to the descending phase of the Ionian strand when he says:

but God does not remain petrified and moribund however; the very stones cry out and lift themselves to Spirit. God is subjectivity, activity, infinite actus, in which the other is only momentary and remains implicit within the unity of the Idea, because it is itself this totality of the Idea. Since Nature is the Idea in the form of otherness, according to the Notion of the Idea, the Idea is not within it as it is in and for itself, although Nature is nevertheless one of the modes in which the Idea manifests itself, and in which it must come forth.

(Hegel 1970a: §247, 206)

- 16 Despite this Bhaskar thinks that 'in announcing the constellational closure of history, Hegel re-opened the floodgates of tensed geohistorical processes, most notably through the mediation of Marxism' (Bhaskar 1993a: 119). This is a theme I will be exploring in the next chapter.
- 17 See also *FEW* (Bhaskar 2000: 40).

- 18 In fact, Archer, Collier and Porpora are completely candid about their Hegelianism. For example, in her attempt to undermine social scientific analyses that operate from a default atheistic position, Archer formulates the theory of *theosis* or 'progressive divinisation' of individuals engaged in a social and material struggle to realise the absolute spirit in the form of God. See Archer's 'Models of man', in Archer *et al.* (2004: 77–80) and also Porpora's 'The human project', (Archer *et al.* 2004: 161).
- 19 Anthropic coincidences basically refer to the statistical improbabilities that intelligent life could ever have come into existence on earth by pure chance. See Porpora's 'The human project' (Archer *et al.* 2004: 155–60).
- 20 Bhaskar (1993a: 337–8).
- 21 I stress Marxist dialectical materialism in order to distinguish Marx and Engels from the theoreticians of the Second International whose own misuse of the system saw it degenerate into empirical realism which was foundational for their crude economic determinism. I will discuss this in the next chapter.

## 5 Marx and Engels

- 1 One might say that, whereas Darwin presented nature as evolutionary but not teleological, Hegel presented nature as teleological but not evolutionary.
- 2 See section 4.3.2.
- 3 See Chapter 4, n. 12.
- 4 See section 1.2.4.
- 5 Buchdahl thinks that Hegel criticised the Kantian categories on the grounds that they were so heavily dependent on the results of science that 'they were too loosely connected with the forms of theoretical science' (Buchdahl 1993: 27). Hegel, on the other hand, wanted logical categories to confer a level of legitimacy on empirical concepts that was unavailable to Kant, given his insistence that the former merely made the latter intelligible. This suggests, as Buchdahl acknowledges, that 'philosophy does not leave the "empirical content" untouched, but rather it must use the laws and classes of science, not just conserving them but "forming and reforming" them through "additional categories".' Philosophy's task, Buchdahl tells us, is similar to that given to it by Thomas Kuhn (1970) of transforming scientific categories and adding additional ones (Buchdahl 1993: 28).
- 6 See section 4.5.
- 7 As Ollman points out, Marx even delayed the publication of *Capital*, vol. II because he wanted to see how anticipated economic crises in England would pan out (Ollman 1977: 61).
- 8 My DCR critique of Hegelian spiritualism is of relevance here. As we saw in the last chapter, the DCR concept of heterology implies relationality – plants and animals are definable in terms of their essential needs, which involve relations with their surrounding environment. I used the example of a water buffalo, which we can now classify as a relation.
- 9 See section 2.3.2, n. 7.
- 10 Cohen in fact, describes his system as a variant of Hempel's (1965) deductive noumenological system (Cohen 2000: 274; Agar 2003: 297, 307, n. 4).
- 11 A similar passage can be found in the *GR* (Marx 1974: 101).
- 12 And this error is, of course, replicated in ontology minus the evolutionary dynamic, as we have seen in section 5.2 above.
- 13 The non-identity between science and philosophical thought makes epistemology fundamentally dialectical and mirrors the matter–thought dichotomy that Hegel thought was prevalent in ontology. But, as we saw in section 4.4.3, the non-identity is continually resolved in the U moment when scientific results correspond to rational forms prominent in basic sense experience and extrapolated

philosophically. This is, as we know, what Bhaskar refers to as Hegel's *realised idealism*.

- 14 Presumably Colletti would be of the opinion that the only major difference between the likes of Kautsky and Cohen was that, whereas the latter explicitly abandoned dialectical materialism, the former persisted with this, in Colletti's language, folly of a crude inversion of Hegel. I don't have a problem with this because in both cases we have a philosophy of externality which is impossible to operate dialectically. My only gripe with Colletti here is that he tars everyone except Marx with the same brush, which is grossly unfair on Engels (and Lenin for that matter).
- 15 See Marx (1977a: ch. 1, §1).

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